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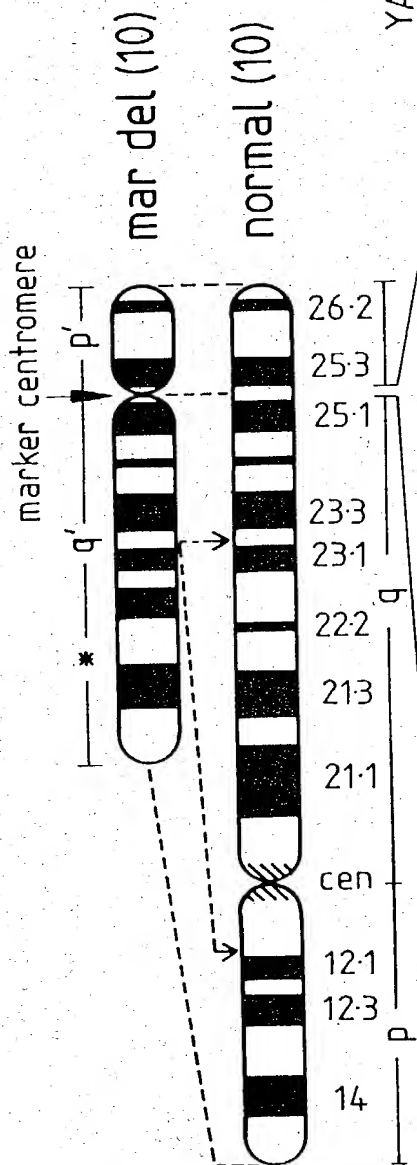
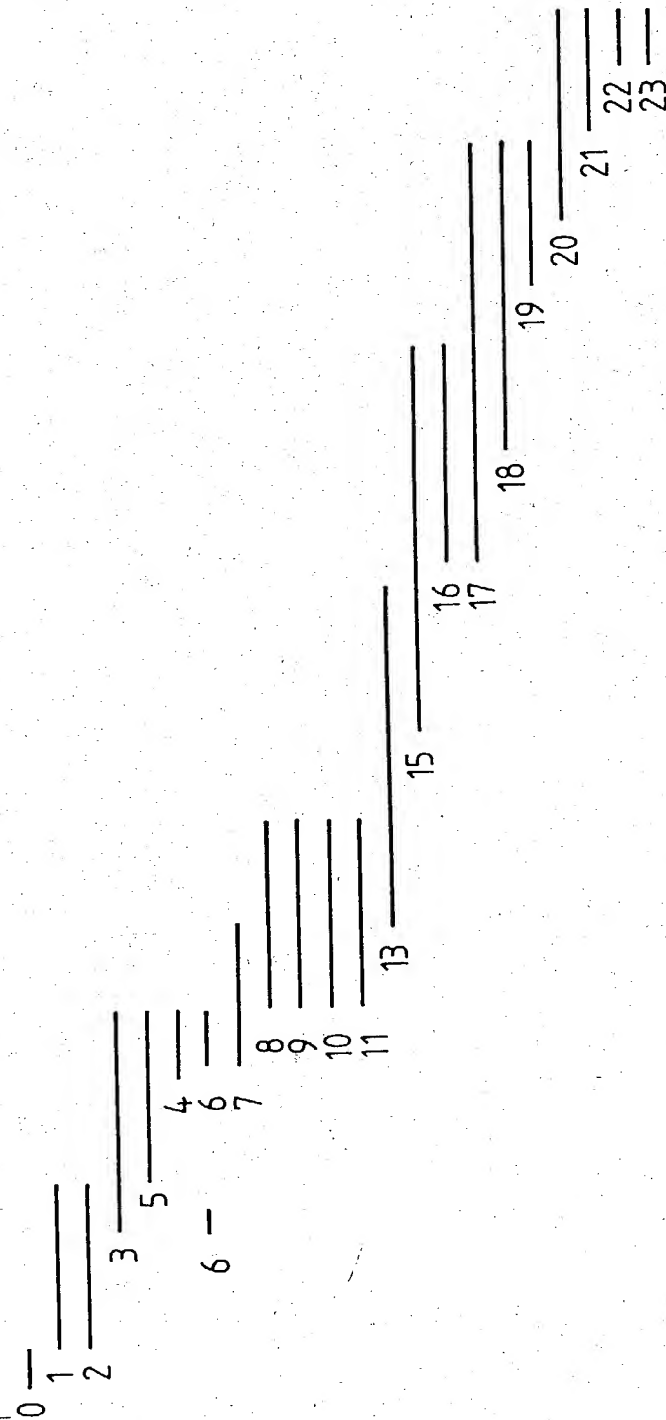
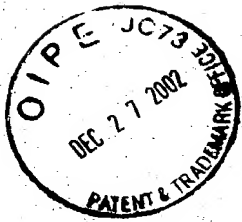


FIG. 1A

FIG. 1B

YAC	Address
39	924-H-11
26	817-E-5
42	947-H-9
45	965-A-3
23	795-H-5
30	846-A-7
31	855-F-1
42	944-O-3
26	818-F-7
28	836-H-11
31	855-A-7
23	789-G-8
41	935-F-11,12
20	770-G-11
28	830-C-2
31	858-H-7
40	926-A-4
23	791-H-10
36	895-E-12
34	880-C-3
27	823-A-8
45	965-F-4

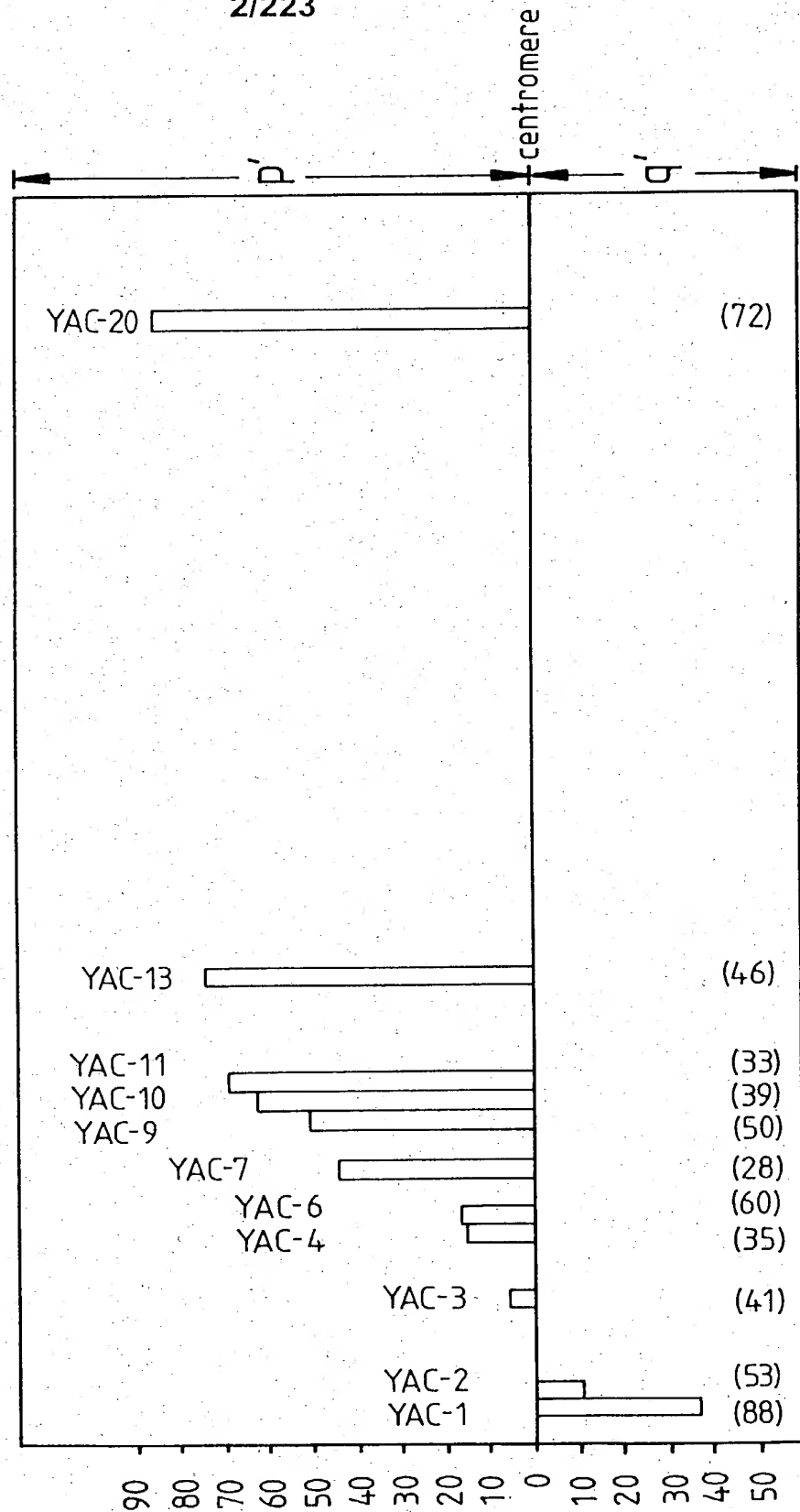


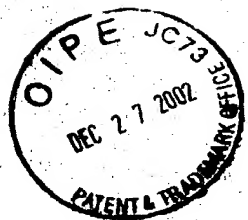


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FIG. 1C





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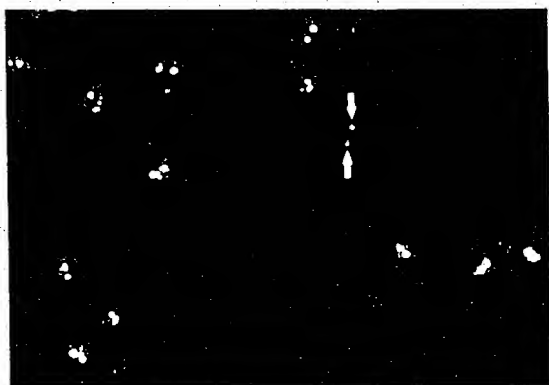


FIG. 2A(1)

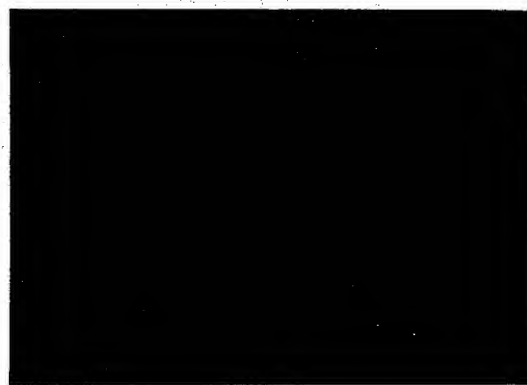


FIG. 2A(2)



FIG. 2B(1)

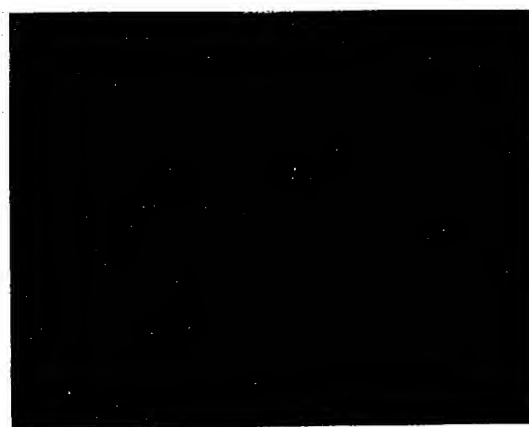
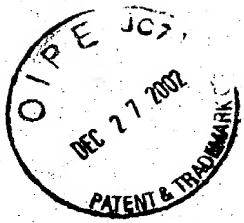


FIG. 2B(2)



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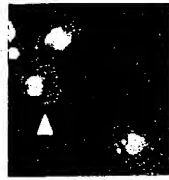


FIG. 2C(a)



FIG. 2C(b)

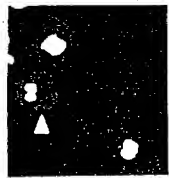


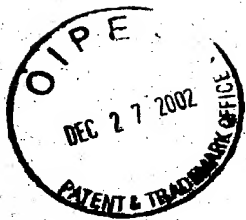
FIG. 2C(c)



FIG. 2C(d)



FIG. 2C(e)



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FIG. 3A(e1)



FIG. 3A(e2)



FIG. 3A(f1)



FIG. 3A(f2)

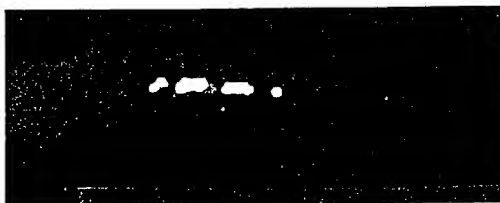


FIG. 3B(1)



FIG. 3B(2)

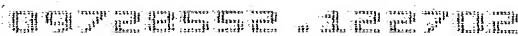
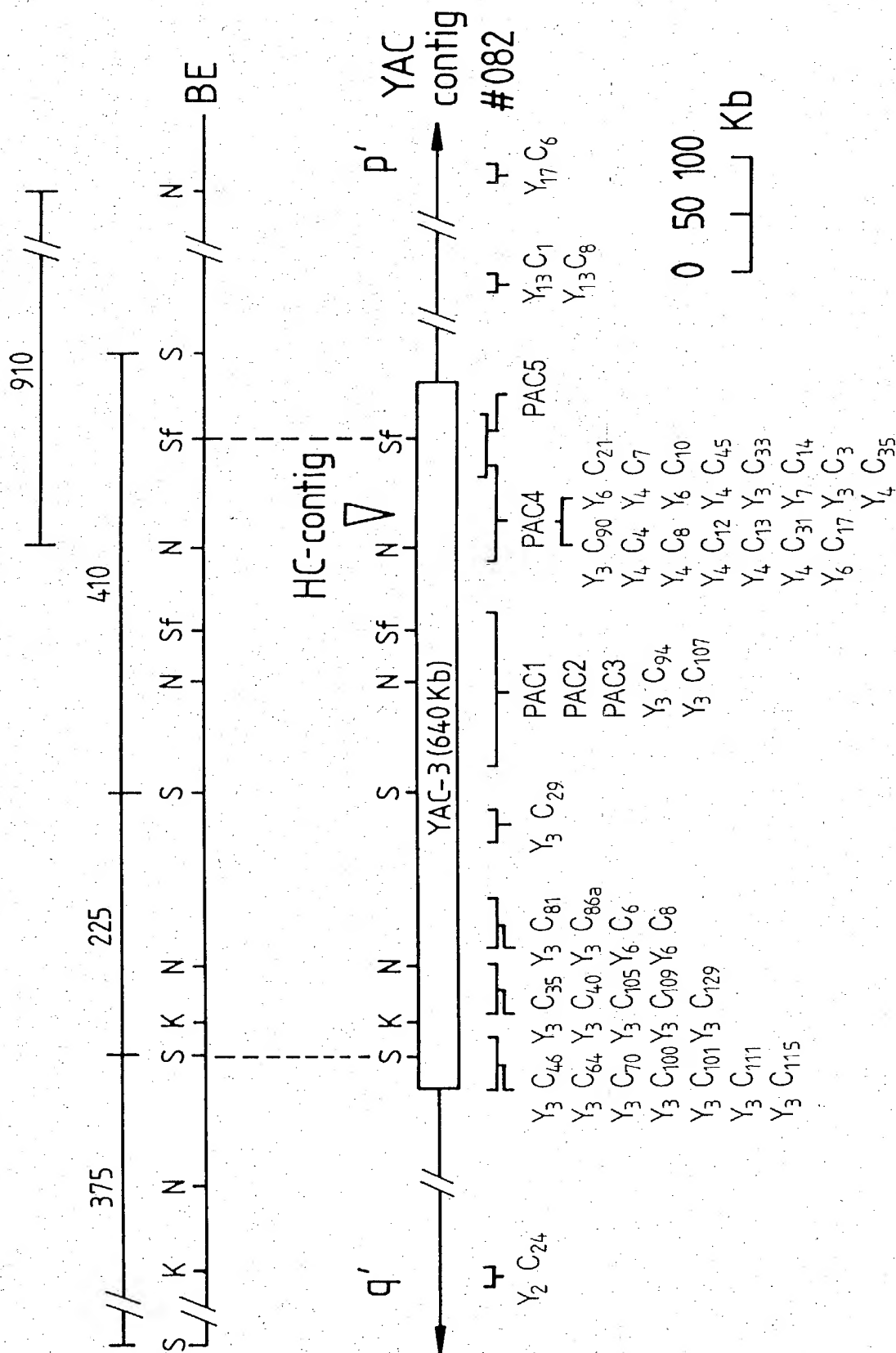


FIG. 4A





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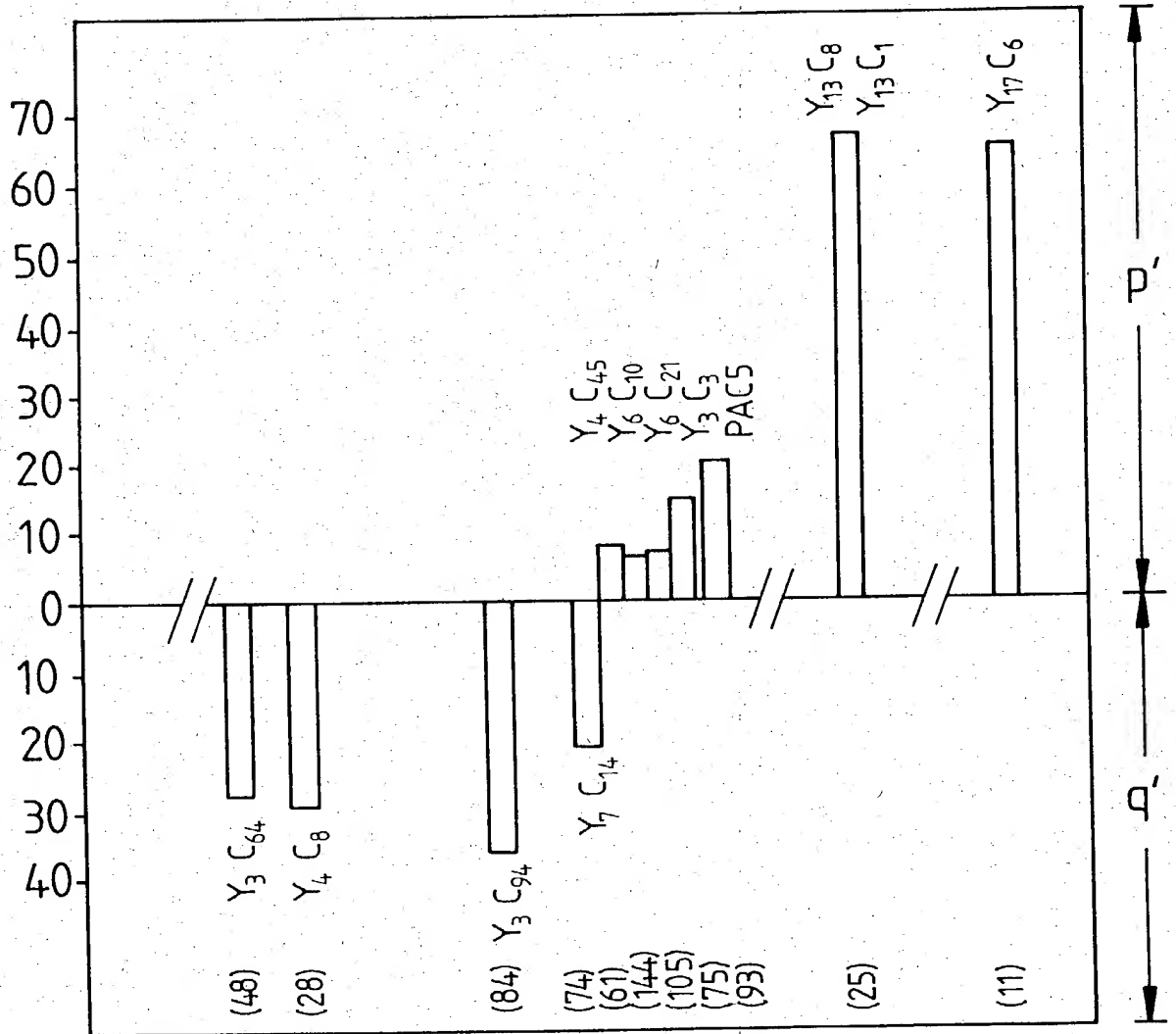
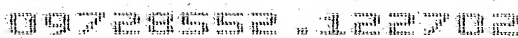
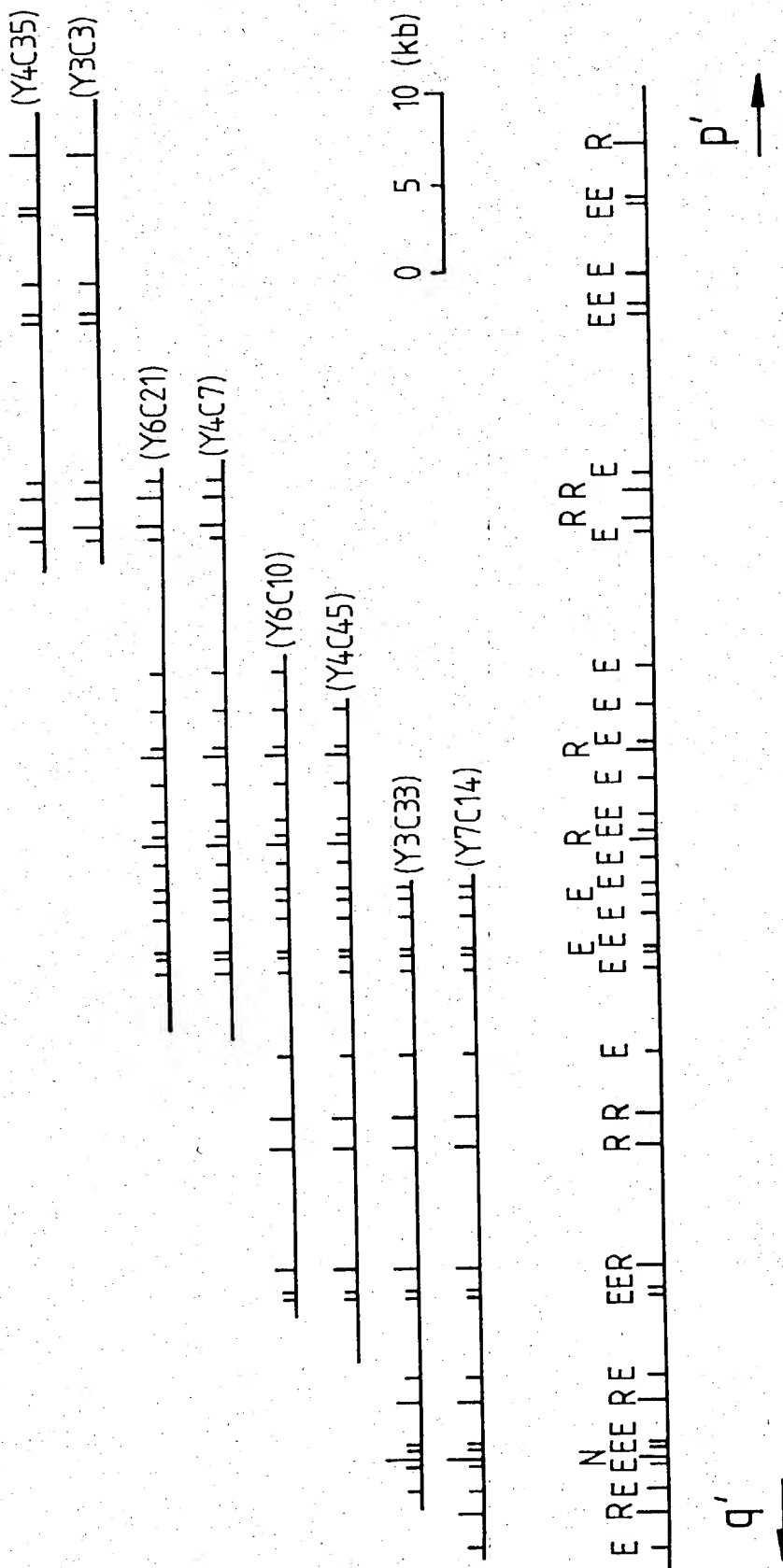


FIG. 4B



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FIG. 4C



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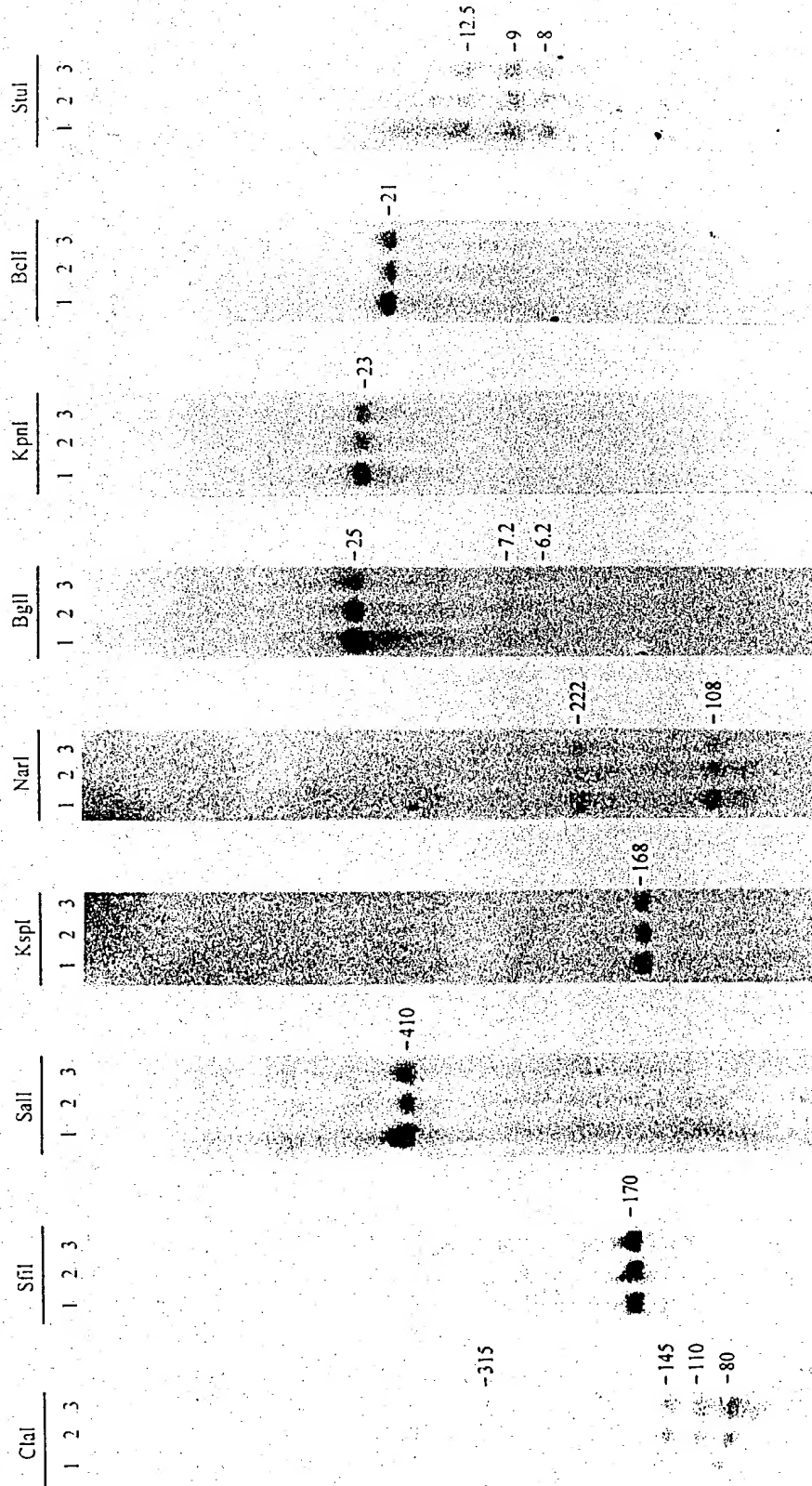
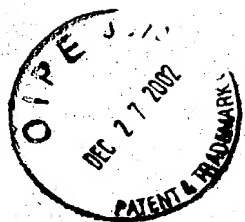


FIG. 5A



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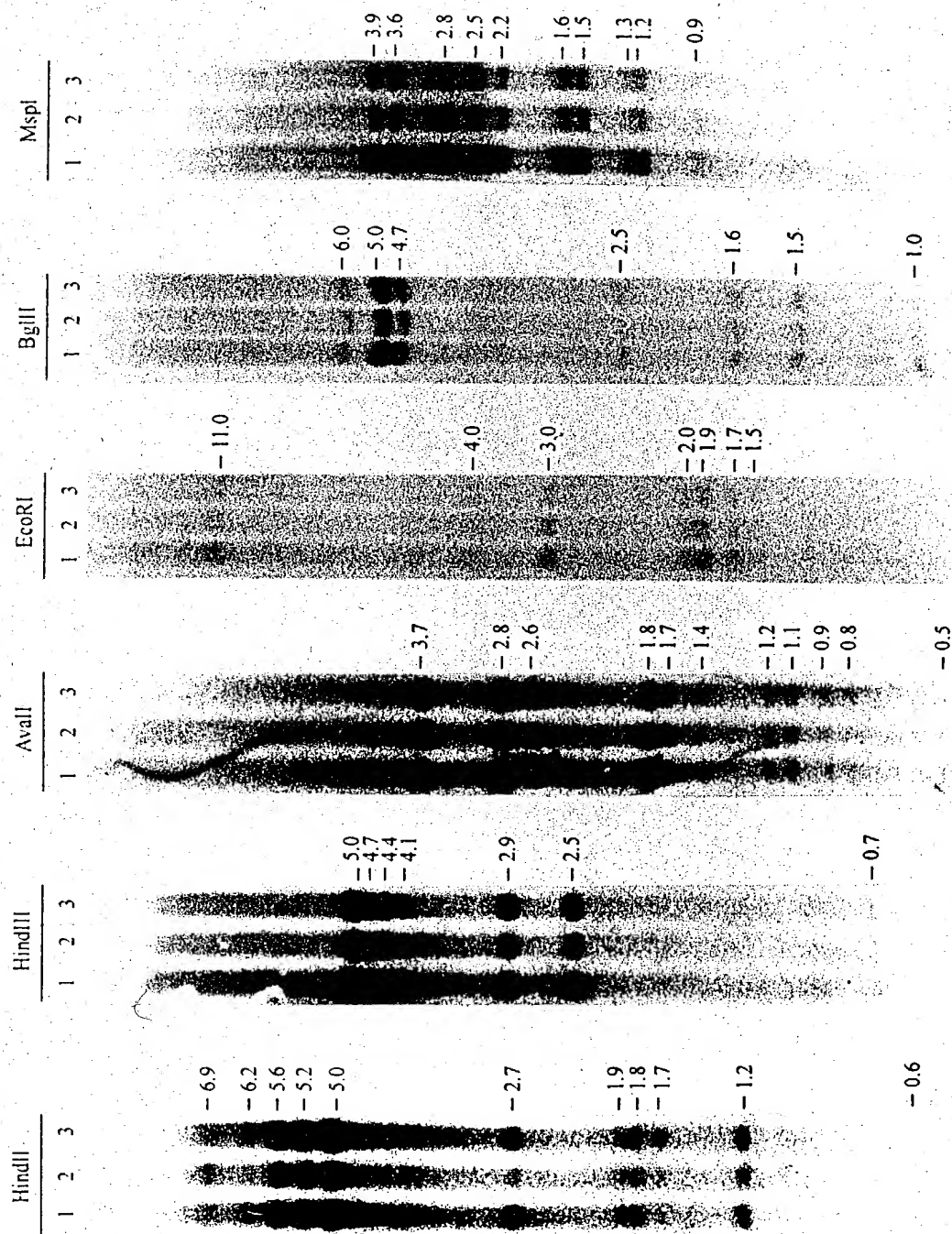


FIG. 5B

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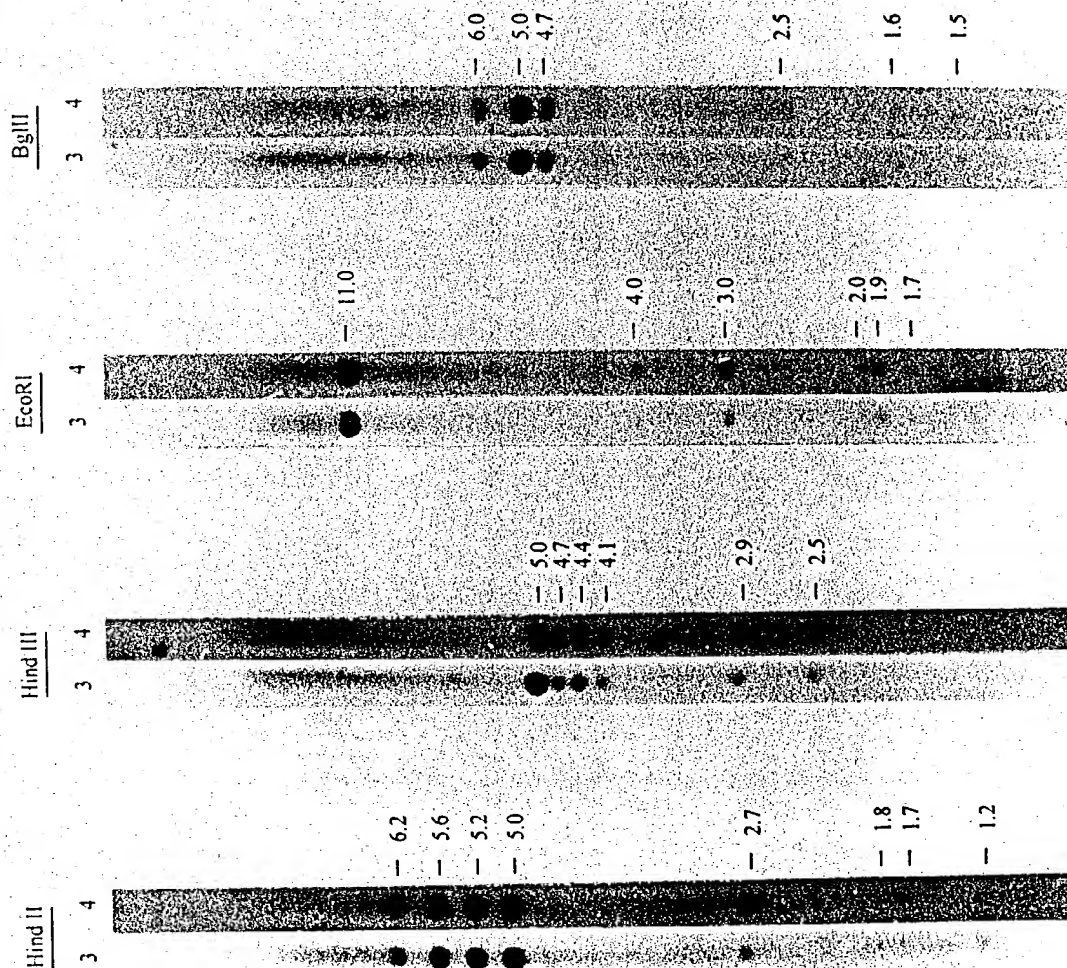
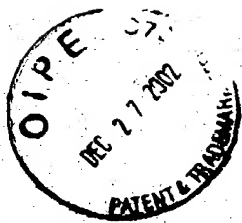


FIG. 5C



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GAATTCTCCT GCCTCAGCCT CCCAAGTAGC TGAGGTTACA GTGCCAGCC ACCACGTCCA
GCTAATTTTT GTATTTTAGT AGAGACGGGG TTTCACCGTG TTGCCAGGC TGGTATCAAA
CTCCTGACCT CAAGTGATCT GCCTGCCCTCA GCCTCCCAA ATGCTAGGAT TACAGGTGTG
AGTCACCGCA CCCAGCCCTT CTTTCAGTTC TATCACCTCT TTTTGCTATA TTTGTATGAG
AGCTTTATTA TTAGGGGCAC ATACATTAA AATTGTTATG TCTTATTGAT AGATTGATCT
GTCATTATGA ATGCTGTGAT TCATTCCCTG ATAGTATTTC TTTTTCCTAAA TATTTTCTG
AATGTGCTG CTATTAAACAT AGCCACTCTG GCTTTTAAA ATTAGTATT TTAGGTATA
TATTTTCCCT TTTTTTTTTT TTTAAGTTTT AGATGTTATG TTTCCCTTATA CTTAAAGTGG
GTGTCTTATA GGCAGCATAT ATCTGGGTCT TGATGTATTA TTTAATCTGA TAATCTCAAC
CTTTTGTG GAGTGTTTAG GCCATTACA TTTAGTGTA TTAGAGACAT GTTTGATTT
GCTATACCAT CTTTTCATTT GTTTTATATG TGAGCCATCT TTTTCATTGT CTTTTTTCAT

A _____ A

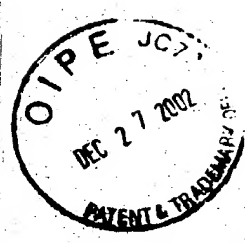
FIG. 6

A_____ **A**

CTTTGACCAT TTCTTTTAGT ACTGAATACT TTTTTTGAT TTCAATTATAT CTATTGGCTT
TTTAGTTATA CCTCTTAAAA TTTTTTTTC TGTTTTATGT AGGATTATA ATATACATCT
TTAACTTATC ACAGATTACC TTCAAATAGT ATTTTACCAG CTCAAGTGTA ATGTAGAAAC
CTTACAAGAG TATATTTTCA TTCTGTCTC CTAATTTTAA TGCTATGTCT ATAATACATT
AGGTTGTG TTGTTGTTT TTACCTTATT GCTGTTGGCT GGGTCAGCA AACATTTTCT
GTAAAGGGCT AGATAGTACA GGCATACCTT GGAGATACTG TGGGTTTGGT TCCATACCAC
CACAAATAA CAAATATGCA AGAAGTGGAT ATCACAATAA AGTGAGTCAC ACAAGTCTTT
TGGCTTCCCA GTGCATATAA AAGTTTGCT TATACTACAC TGTAGTCTGT TAAGTGTCGA
ATAGTGTTAT GCTAAAAAA ACACATACCT TAATTTTAA ATGCTTTATT ACTAAAAAT
GCTAACATC ATTGAGCAT TCAGTGAGT GTAATCTTTT TGCTGTGGA AGGCTTTTC
TTATTGATGA CTGATCGGG GTCAGGTGCT GAAGCTTAGG GTGGCTGTGG CAGTTCTTA

_____ **B**

FIG. 6A(1)



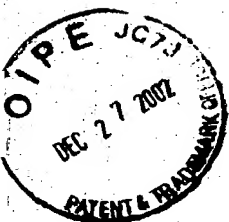
B**B**

AAACAACAGT GAAGATTGCA ATATCAGTTG ACTCTTCCCTT TCATGAAAGA TTTCTCTCTTA
GTGTGTGATG CTTTTTGATA GCATTTTATG CACAGTAGAA CTTCTTTGAA AATTGGATCA
ATCCTCTCAA ACCCTGCTCT GCTTTAACAA CCTAAGTTAA TATAATATTC TGAATCCATT
GTTGTCATTT CAACAATTTT CACAGTGTCT TCACCAGGAG TAGATTCCAT CTCATTTCTCT
GAGATGGAAT CTTTGCTCAT CCATAAGAAG AAATTCCTCA TCTGTTCAAG TTTTATCATG
AGATTGCAGC AATACAGTCA TGTCTTCAGG CCTCACTCA CTTTAAATTC CAGTCTCTTT
GCTGTTTCTA CCACATCTGT GGTTCCTTCC TCCATTGAAG TCTTGAACCT CTCCAAGTCA
TCCATGAGGG TTGGAATCGA CTTCTTCCAA ATTCTGTGA ATATTATAT TTTGACCTCC
CATGAATCAT GAATGTTCTT AATGGCACCT GGAATGGTGA ATCCTTTCCA AAAGGTTTTC
AATTACTTA GTCCAGATCC ATCCATCCAG AGGATCCACT TTCAATGCCA GTTATAGCCT
TATGGAATGT ATTTCTTCAA TAATAAGGCT TGAAAGTTGA AATTACTCCT TGATCCATTT

C**C****FIG. 6A(2)**

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C _____ **C**

TCGCAAAAT AGATGTTGTG TTAGCAGGCA TGAAAGCAAC ATTAATCTTT TTGTACATGT

CCATCAGAGC TCTTGGGTGA CCAGGTATAT TGCCAGTGAG CAGTAATACT TTGAAAGGAA

TTATTTTCT TAGCAGTAGG TCTCAACAAT GGGCTTAAAA TATTGGTCC ACCATTCTGT

AAACTGATGT GCTGTCATCT AACTTTGTA GTTTCATTTA TAGACACAG GCAGAGTAGA

TGTAGCATAA TTCTTAAGG ACTTAGGATT TTCAGAATGG TAAATGAACA TTGGCATCAA

TTTAAATCAC TAGCTGTATT AGCCCCCAAC AAGAGAGTCA GCCTATTTT TGAAGCTTTG

AAGCCAAGCG TCGACTTCTC CTCCCCTGGT ACAAAAGTCC TAAATGGCAT CTTCTTCCAA

TATAAGGCTG TTTTATCTAC ATTGAAAATC TGTGTTTAG TGAGCCACC TTCATCAATG

ATACTATCTA GATCTCTTGG ATAACTTGTG CAGCTTCTAC ATCAGCATTT GCTACTTCAC

CTTGACTCT TATGTAATGG AGTGGCATCT TTCCCTCGTAC CTCATGAACC AACCTCTGCT

AGCTTCCAAC TTTTCTTCTG TAGTTTCCCTC GCCTCTCTCA GCCTTCATAG ACTTGAGGAT

D _____ **D**

FIG. 6A(3)



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D _____ **E**

AGTTAGAGAC TTGCTTTGGA TTAGATTTTG GCTTCAGGAA ATGTTGTGGC TGGTTTGATC

TTCTATCCAG ACCACTAAAA CTTTATCCAT ATCAGCAATA AGGCTGTTTT GCTTTCCTAT

TATTTGTGTG TTCACTGGAG TAGCACTTTT AATTGCTTC AAGATATATT TCTTTGCATT

CACAACTGG CTGACTGGTG CAAGAGGCCT AGCTTTCAGA CTATCTTGGC TTTTGACATG

CCTTCCTCAC TAAGCTTAAT CATTCTAGC TTTTGATTTA AAATGAGAGA TGAGGCCAG

GCACAGTGGC AGGCACAGTG GCATATGCCT GTAATCCAA CACATTAAGA GGCCAAGTG

GGAGGATTGC TTGAACCCAG GAGGTGGAGG TTGTAGAGAT CACACCACATG CATTCGGTCC

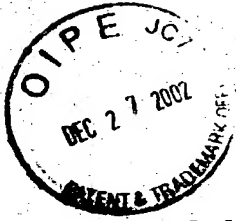
TGGATGACAG AGCAAGACCT TTCTCAAAAT AAAATGAGAG GTGTGCTTCT TCTTTTGT

TGAGCCCATTA GAAGCCATAG TATGATTTT AATTGGCCTA ATTTCAATAC TGTGTGTCT

CAGAGAATAG GGAGTCTGA AGAGAGGGAG AGAGGTGGG GAATGGCTGG TCAGTGGAGC

AGTCAGAAC CACATAACAC TAATAAATTG TTTGCTGTCT TATATGGATG TGGTTTGTA

FIG. 6A(4)

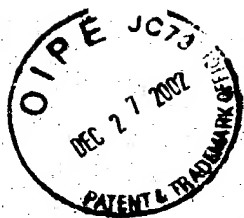


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E _____
TGCCCCCAA CAATTACAAT AGTTACAGCA AATATCACTG ATCACAGATC ACCATAACAG
ATATAAGAAT CATGGCAAAG TTTGAAAATAT TCTTGAGAAT TAGCAAAGTG TGACACAGAG
AAACAAAGTG AGCACATGCC GTTGGAAAAA ATTGGTGTG ATAGACTTGC TCCATCGCAA
GTTTGCCATA CGCCTTCAAT TTATAAAAAA CACAATATCT AGGAAGTTCA ATAAAGTGAA
GTGCAATAAG ATGAAGTATG CCTGTAAAAA TTTCAGGCTT TCCAGACCAT AGGGTTTCTG
TTGCAACTGC TCACCTCTGC CATTATAGCA TGAAGCAGC TATAGAAAAT ATACATAAAT
GAGGCCTGTA ATCCCAACAC TTTGGGAGCC CAAGGTGGAT GGATCACTTG AGGTCAGGAA
TTCGAGACCA GCTTGGCCAA CATGGCAAAA CCCCGTCTCT ACTAAAAATA CAAAAATGAG
CCAGGACTAC GCATGCCCTGT AGTCCAGCT ACTTGGGAGG CTGAGGCAGG AGAATCTCTT
GAACCCGGGA AGGGGAGGTT ACAGTGAGCC AAGATTGTGC CACTGCATC CAGCCTGGGC
AACAGAGTGA GACTGTCTCA CAAAAAAA AAAAGGAAA GAAAATACAC ATAAATGAAT
F _____

FIG. 6A(5)



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F _____ **F**

GTATGTGGCT GTGTACCAGT ATATCCTCAT GCTCTAGCTT GCCAACCCCTT GCTTTACACT

GTCAGTTACC TTCTAAAGAG ATTAAAAATC ATAACAATAT CTATTACGTT TATTCACATC

CTAGTGT CAT TTCTTCCTTA TGAGAAATCA AATTTCATTC TGGTATCATA TTCTTTCTTT

CTAAATAATT TCCTTTAATA TTTTTTATAG CACAGGTCTA ATAGCAATGC ATTATGCAAT

TCATTGCTAT TAGACCTGTG CTATAAAATA GCAATGAATT ATGTCAGTTT TTATTGTCT

GAAAAAGTTT TTTGTTTTTG AAATATACTT TTGCTGGGTA TATAAATCCA TGTTCATAA

CTTCTCTTTT CTTCAGCACT TTAATGAAGT CACTCAGTTA TCTTCTGGCT TGTATAGTTT

CTCTGGCTGC CTTCAAGATT TTTTCATTGT CTTTAAATTT TAGCAGTTTG ATGTGTCTAG

GAGTGATTTT CTTTGATTT ATCCTTTTGG GGGCCCTCTTA ATTTCTTTGA TCCTTTTTTT

CTTTTTTTTT TTTTTTTAAT CAGTTTTTGGT CTGCTCCTC AAGTGGGCTG AAAAAAAG

AAAAATAAAA TCATAGTTTA AAAAATAAT TTGGAAAAAT TTTCAGCTAT CATTCTTCA

G _____ **G**

FIG. 6A(6)



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G
AATATTTATC CTA CTCTATG CTCCCCCTCCT CCCCTTTCCCT TCTGTGACTC AAATTACAGG
TATATTTAAC CATTTTATTT GTTCACGGCA CTTGGATGCT CTGCTTTCTT ATTTTGTGTC
TTTCATTTTG GATAATTTCT ACTGACCTAT CTTCAAGTTC ACTGATTCTT TTCTCAGTCA
TATCTAGTGT GCTCAACGCC TGTGAAGAA ATCCTTTGTC TTAAATATCA TGTTTTATAT
TTCTAGCATT TTCATGTAAC TCTTTGTTCT GGTTCCTCATC TCCTACTCA CTTTTTTTTT
TTTTTTTTTT TTTTTTTGAG ACAGAGTCTC GCTCTGTCAC CCAGGCTGGA GTGTAGTGGC
GCGATCTCGG CTCAC TGCAA CTTCGGTCCC CTGGGTCAA GTGATTCTCC TGCCTCATCC
TCCCGAGTAG TTGGAATTAC AGGTGCCAC CACCGTGGCT GGCTAATTTT TGTATTTTTT
TAGTGGAAC AGGTTTTCAC CATGTTGGCC AGGCTGGTCT TGAATTCCCTG ACCTCAGGTG
ATCCACCTGC CTCAGCCCTCC CCAATTGCTG AAATTACTGG CATGAGGCAC TGCACCCAGC
TCTGCTGACA TTTTTTATCT TTTGCTGCAT TTTGCTTACC TTTTCCATGA AATCCTTTAA
H

FIG. 6A(7)

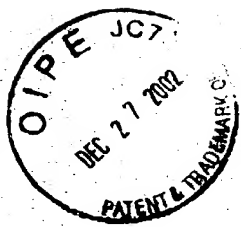


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H _____ H
CATAGTAGTC ATAGTTACTT TCAATTCCCTT GTCTGACAGT TCTGACATTC AAGCTAGGT
CTGTTAATAG CTTTGTGAGT CTGTTAACAG CTTTTTTTCA TTCTTGTCTG TGTGTTTTGT
ATTTCTTGAT TGTATGCCAA ATATTGCCCTG TAAATAAACC TTAGATAAGT CATACTTCTA
TCCAGAAATA GGCACATTTT TTGTGTCCAG TCATTAGTGT GGAGGGAGGT TGGGGCAGTC
TAGTCAGTGG CTGAACTAGG TTTGGATTG TTGATGCTAT ACTTAGAATG CACCAGACTT
CCATTCAC TG CAAGAGTGGG CTGCTGCCGT TTGTGATTCA TGTGAGGCCT GAATTGTGGG
TTTTTCCCTA GTGTGTCCCT CCATGCTCAG ATTTCAGCA GTCTTCATAT CTGTGCCACA
GAAGGAATCT GACCCATGCT CTTTTTGACC TCCCCAAGTG ATCAACTGTT GCTTGTATA
GCTTGTGATG GAGTAAGAGG GTGTTTTTTT AGTTTTCATC CTCCAGCCTT GGTCTTGGGC
CCTGAGCTCC TAGACTCCAG GAGTGATGG AATCCAGTGA TTTCTCAGTA ATTCAGCCCC
TTCTCCAGTA GTGCAGATC TCTGCTTTGT ATCAGTGCAA GATCCTGGGC TGAGCTCAT
_____ I

FIG. 6A(8)

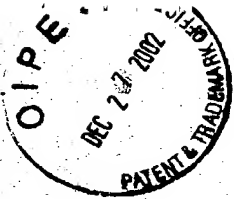


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TTCTGCCCTT CCTCGAGTGG CAGACAGCTC TTGCTTTCAC CCTTCTACCA AAGGCAGTGC
ATCTTTTCTT GGGCCTCTCC CCATTGAACT TATGACTTTC ACATAAGAGA AGGGCTCATG
TATCAGAGAA TTCTGTGACT TTGTGCCACA TACAGAGTCT CTCAGTTCTC TTGCCCTGCC
CCAGTCTTTT TTGTGAGCAC CTAGTAGAGA CCCTTGGAGA AGAGCAAGGA AGCGAGTATG
GACTTCTTTT GTGTCTGTCTG ATTGCTTTGT TTCTCAACTG CTACTCTTGG ACTTTAAGAA
TTCATTAAAA TTTCAGCTGT TTCTTTTAT TCCTTTTGT TTTCTTTTTT TTTTTTTTTT
TTTTTAGATG GAGTCTTGCT CTGTTGCCCA GGCTGGAGTG CAGTGGTGTG ATCTTGGCTT
GCTGCAACCT CCGCCTCCCG GGTCAAGCG ATTCTCCTGC CTCAGCCTCC CAAGTAGTTG
GGATTACAGG TGCCCACCAC CACACCTGGC TAATTTTGT ATTTTAGTA GACACAGGGT
TTCACCATTT TGGTCAGGCT TGTCTCAAAC TCCTGACCTC ATGATCTGCC CGCCTCAGCC
TCCCAAAGTG CTGGGATTAC AGGCATGAGC CACCGGCCA GGCCTCAGCT GTTCTCTTTT

FIG. 6A(9)



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J _____ J

TACCTGCTGG GATGGCTAGT TTTCTGTGTC AACTTGACTG GGCCATGGGA TGTCAGATA

TGTAATTAAA CAGTATTTCT GGGTGTCTTCT GTGAGGGTGT CTCAGAAGA GATTGCAAT

TGAATTGGTG AACTAAGTAA AGCAGAGGGC CCTGTCTAGT AGGGTAGGC ATCATCCAGT

CTGTTGAGGA CTTGAATAGA ACAAAGGCA GGGGAGGTT GGAATTGCC CCTCTCTGCT

TGAGCTGAGA CATCTATCCT GCCCTTGGCA CTCCTGGTTC TCAGGGGTTT AGACCTGGAT

TCCTGGTCTC CACCTTGCCC ATGGCAGACT GTGGGACTTC TCAGCCTCCT ATCTAATTAA

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CCCTATGTAT CCTTCTGTTT CTCTGCAGAA CCATATCTAA TACACCTGCT TTTATGACGA

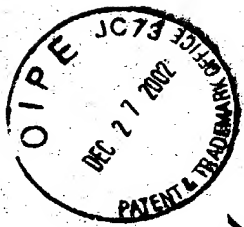
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AGAGAGGCTT GTCAGCCATT AGTTCTCTGA TGGGCTCAAG AAGTTATGCA GTTTTITTTT

TCTCACTGTT AGGATGGAAT TGATATTCTG TTGAAACTTT CTATACCTAA GTGAAACTT

K _____ K

FIG. 6A(10)



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K

GTTTGAGGT TATTTTCTCT ACTTACTTTT GCTGGAATG GAACACTCTG TATCTAGTTA
AGACACATAA ACTGACTTGT GATACCATAA TGTTGTGTTG AATTTATAT TCTTAGAAAA
TCATCTGTCA AGGTGTTAAC TAATGGCAA GCATTTAATA AATCAGCATT CATGTATTCA
GGTGCTCTGA ATTATCTGAC TTTTAAATTC TTACTTTATA AATGAGAAAA TTGGGGCATG
GAAAAGTTAA CTCCTCTAAC CCCGAATTAT TACATTATTA AGGACAGGAC TTAGAGGCCA
GATATCTTAA GTCATTAAATA TTCTTTGGCT CACAGAATTG GCAGTATAAC CTAAAGGTAA
TAACTAGGTG ATTTTCTTTT ATATCAATTA AATATGTCAG TTTTCAAATA TTCATAAGTA
CCTACTGTGC AGGGAAGAA CATGCCATAC AAAAGATGTA GTCCAGGCCT TTAAGAAACT
TTCATTTAAT GGGAACCTCA GAAAGTGACA TATAAGGAG GAAGTAGCAG TATGGTACAA
GATAATACAT ACATATCAGT GAATGATATT GCCAAAAAGT GCTATTGATA GAGAAATAAT
TCATTTCTGC AACAGCTGC TGATCTCCTA CTGAAAAACAG AGGAGGGAGA ACAGGACGCC

L

FIG. 6A(11)



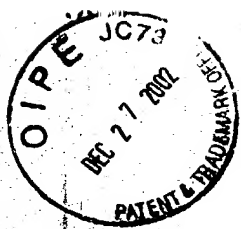
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L
TCGTGGTCAG GATAGAAGAG AAAGACCCTTG AGTTGAGCCT TGAACAGTAT TTAATATTCA
AAAGGTTAAG AGAGGAGAGC AATTGAGGAG GGGAGAAATAG TTCCAGCACA AATGATGGTG
TACAAGATGA ACACAGTCAG TAAAGAGCAG ACTGGTCTGG ATGGAGAGGA GGATTTCAT
CATTTGGGAT TACGTCATTT AGACCCTTGA AAGCCAGGAT TGAGTAAAGC CACAGTGAAG
CGACTGGCTC GTATGGAAGC TTTATTTTAA GAAGATTAA CTGGTAGTGA CATGTGCCAA
AAACTGAATA GGAGAAAATG AGATGCAGAG AGCCAGTTA GAACTAAGTC TGGTGCAGTA
ATGCAGGATT GAGGCAATAA ACACCAAAT ACAGTATCAC CAGATAATGG ATGTTTGAAC
GGACGGTTA AAGGAAAATT GATGGTATTT GGTAATTTAT TAGATAATCC AGGGCCATGG
AATGAGAGGG GAAAATGACT AACCATAGTC ATCAAATGGT TTTTCTTAAT GAATCTGAAT
TTTGGTGTA GAGCAACATT TTCTTAGGCC TTGCCTAGTT GGTACAGCTG ACTATGATAA
TGA CTGCTAC CATGCTTGTT CCTCTTTTAG CAGCTGTGAG TCCCCCACC GCAAACAAT
M

M

FIG. 6A(12)

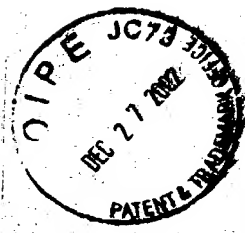


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M _____ **M**
GAGCCTCTTG AAAAGGACGA TGCCTTTTCA CTTCTCTCCA AGTGCTTGGC AAATAGGAGG
CCTTTTGAAG TTACTTTTATA GTTAGGGGTT CCCAGTGAGT ATTTGAAAATA TTAAAGTCATG
CCCGTG GTTG ACAGCATGGC CCTACTGCTC ATCATCAGCT ATTAACCTTA GGCAAGTTAA
TGAAC TTTTC TAAGCCCCAG TCTACTCAT TATAAAGTGG GATTATTAAT AATGCTACT
TCATAAAAATT ATGAAGCCTG AGTTAGGTCA TTCAGATAGT GTTTAGTCTG ATTCTTCGAA
CCTAGTAAAC AGTCAGTAAA CAGAAGCAA TGCCACATGC CTGATTATA TCCAAGGGGA
GAAAGGTAAA AGTGAAATTT TCATGATTTA TGGATTCAA TTATACATTT CAAAGATGCT
TTATAAGCTA TTGTTTGGT AAGAAGAATT GAGCTGAAAC AGAATTTTCT GACAGCAGTG
ATTATTAAAT GGTGAAATAG GCTATTGATG TCTTTAGAGG ATATAGATGT TCACCTTTTG
CATATAAGTG CACAAAATT CACTAAGTAG ATATGTCTGT CTACACAGAG AGAGAGAGCG
TGAGAGCATT AAAGTTAGTA AACATCCCC TCGCTTTTTT TTTTGTGAGA CAGGGTCTTA
_____ **N**

FIG. 6A(13)

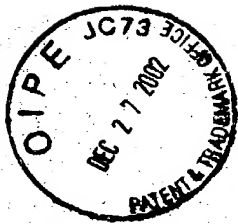


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N
CTCTGTTGCC TAGGCTGGAG TGCAGTGGTG CAATCGTGGC TCACTGCAGT CTCAACATCC
TGGGCTCAAG CGATCCTCTC GCTCAGCCTC CTGAGTAGCT GAGGTGTGCA CCACCACACC
CGGCTAATT TTAATTTTT TTATTGTAAA GTGAGGTTT CACCATGTTG CCCAGGTCTC
AAACTCCTGA GCTCAAGCAA TCTGCTCACT TCAGCCTCCA AAAATGCTGG GATTACAGGC
GTGAGCCACC ACGCCTGGCC AGTAAACCCC ATTCAATTAC ATCATCTTAC TTGTCCCTCC
AAAATCCTGC AAAGTAGGTA GGTTCCTGCT TTATTGTTA TTAGGTGAA GAACTTGAAG
TGGTGTGAG GAATAGGTGT TTGCCAAGA GTCACGCAGC TGGAGTGGCA GAGCTGTATA
CTCTTCTGAT TCCACCAACG CTGTTTACAT CACATCTGGA GAAAAGTGCT CTGAGGCACA
GATGTTTAGT GGGAGGGATG AGACACAGC TGCAATGCCT AAAGATAATC GGGAATAAAA
GCAGAAAACA AGACGTTTGT TTCTGTAAA ATGAGACAGA AAATAAGCG TTTGTGTGTT
GGGATTGAGC ACTTGAGAA GTGGGAGCG ATTGATTG GGTGAGACTG CTCCTGGAAT
O

FIG. 6A(14)



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O _____ O
GCTGCATCTG GTTCTGGACT ACTCATTACT AGGCTTATAG AAAC TAGCTG GAGGAGGTTT
AAAGAAAAGC TCCAAAATGA TTAGCGGGCT GACGGGATTG ATTTATAAGA AATATTAAAA
GAATTAAATG TGTATAGCTC AGCTAAGCAA AGATGAAAAGA GACCAGCTAA ATGTATACAA
ATATCTGAAA CGTGCAAACT TTAAAAAGAG AGATTAAATTA TTAAACATGA TACACGGGGG
CACAAATATGC AGTCACAGGA TGAAAATTTC AGCTGAGTAT CTAGAAGAAT TCCCCGATAG
TGAATCTGTT AAGCTGTCT GTAGTGTCCT CTTTCCCTGG AGAGGCAATA GAAATTTCAA
GTCTTACGAT TTAAAAAGTT TCTTGGAAC TAGTATTAG ATGATGTTAG AGAATTATTA
TTAATTGGT CAGGTATGAT AATGGTATTG TAGTTCTATA AGAAAAATTG TATTTTITAG
AGTTACATAC CCTGAAATAT AAGCATAGAA TATGATGTAG GAGATTGCT TTAAAAATACC
ACAGTAAGGA AAGAAAGGAA GGAGGAAGAA AAGAAAGGAA GGGGAAGAAA GGGAAAAGA
GGCAAAGAAG GAAGAGAAG TAAGAGAAAG AAAAGAATG AAGGAAGAAG GCTGGGCACT
P _____ P

FIG. 6A(15)



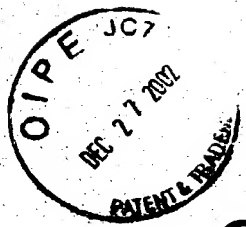
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P _____ **Q**

GTGGCTCATG CCTATAATCC CAGCATTTAG GAGGCCAAGT TGGGAGGATC ACTTAATTAA
GCCCAGGAGT TCAAGGCTGC AGTGAGCTGT GATTGCGCCA CTGCACTCCA GCCTGGGTGG
CAGAGTGAAG CCCTGTCTCT AAAAAAAAAA AATAAGTTAA AAAGAAAGAA AAGGATAGAT
GAAGTATGGC AAGATGTTGG TAATGTTGAA CCTGAAGGAA GTTAATATGT GAGTTCACCT
TCCTCTTCAG TCTTCTTTAT GTATGTTTGC CAACCTTTCAT AATAACAAT TTAAATTATA
TTTTCTGAT CAAAACCTTAG TAGCAGTATT AATCCCTGGG CTTCCTGACT AGAACAGCCT
CATTACCACA TGGCAGAGT TCTGGCCGAC CAGGACCAC GTAGTGCTC ACCATCTTGC
TCTGGTAATG TGGTCTGGC TGAAGGGCCC TTTCTAAGGT TGATAGATA AATCCAGGAA
ACTTGTTAGA ACTGCAGACC TATCAGGTA CTGCAGGAG GTGAGTCTAC TAAGTGAAA
AAGCAGAGG CAGAGGTCGT GATTAGCAGC TGACCGCCCC CTGCTTTTCT GTCCCTCAT
CGTGAAAAT TGAGTGGAGC TCAATTTTGA GTGAGCTCT AAGTAGCTCC ACTGTAGAC

FIG. 6A(16)

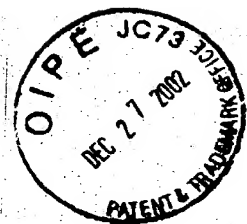


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Q _____ **Q**
ATTGAGTGGA GCTCTAAGTG TCTTCAGAAT AGCAAAACAC TAGTTTCTT TTTCTTTTCT
TTTTTTTTTT TTTTGGAGAC AGAGTCTTGG TCTGTCGCC AGGCTGGAGT GCAATGGCAC
GATCTCCGCT CACTGAACTC TGCCTCCCCG GTTCAAGCGA CTCTCCTGCC TCAGCCTCCC
GAGTAGCTGG GATTACAGGT GCCCACCACC ACGCCAGCT AATTTTCCCTA TTTTATAGTAG
AGATGAGGTT TCACCGTGTT GGCCAGGCTG GTCTCAAACCT CCTGGCCTCA AGTGATCCGC
CTGCCTTGGC CTCCCAAAGT CCTGGGATTA CAGGTGTGAG CCACCACACC CAGCTGCAAA
ACCTATTTT TCTTGAATGG AGAAACACTT TCCCCTTATT TATTGAGTTT GGGAAGCAAG
AAGAGGGGTA ATTCAATTAAG TGAATAATTC CAAATCCAG AAAACATCGA TAAAGCAGCA
GCTTAATTTT TTTAAGGAAG AATTTTAA ACTATCTTCT TTTGAGCCTC TTTAGGAAGA
CCTCACGTCC TTGCCTTGAA TGTGAGAGT GGGAATCCA GGGAGTTTG GAATGCATGC
CTTATGCTG CTTTTTTGTT TGTTAGAGAA ATATAAATAT TTTATCTAGG TTTTGCTGAT
R _____ **R**

FIG. 6A(17)

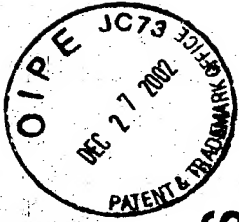


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R _____ **R**
GGCAGTCAAG CATGAACACA ACCCACTGTT TGAGAAGCTG TAATTCTGA ATTTCTGCAG
AGTGCACATC TAGCCAGCA AATGGCAGTA AGAGTGAGGT GGATTAGCT CAGTGTAAGG
ATGAACTCCA GAACCATCGG CTCTGACTGA AAGTGAAGCG GCAGCCGCGT TGTGGAAAG
CTGGCTGGAG TCTCTCTCAT AAGCAGGCAT TCTTTTCTC CAGCCCGTCA CTGTGTTGGT
TTGGGCCAC GGTAAAGCCTC CTGGCCTCTA GGCTGTAACC CCCACCATCC TCCTCTGCCT
CGCCTCCAGA GTGATTGTTT TGAAGCACAA CTGGATGTCA TTCCCCCTTC TGAACCTCTA
GCACCTACAG GGAATCCATC CCTTGTGCCC CACATACCTC ACACGTAGAC ATTCCTAATG
AAGATTGAT TGAATTATTG TAAACTCAGT GCCTCCCACT CTTCTAGTTG CCTCTCTGCC
TGCCTTTGTA CATTATTATA TTTATTTATT TATTATTATA TTTATGAGAC AGAGTCTTAC
TGTATCACCC AGGCTGGAGT TTAGTGGAC CATCTCAGCT CACTGCAACT TACCTCCCAG
ATCAAGCAAT CCTCCACCT CAGCCTCCCG AGGAGCTGGG ACCATAGGCA CGTGCCATAT
_____ **S**

FIG. 6A(18)



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S _____ **T**
GCCCGGTAA TTATATTGTA TTTTGTAGA GATGGGGTTT CATCGTGTG CCCAGGCTAG
TCTTGAATC CTGGACTCAG GCGATTGCGC CGTCTCAGTC TCCCAAAGTG CTGGGATTAT
AGCGGTGAGC CACCATGCCC AGCCGCTAGC ACTCATCTTA ATCGTATATT TACTTATCTG
GCTTCCCAC CAGACTGCGG GCTCTTCAAG AGTAAATGCC ATGTTTTCAC CTTTATTTC
CCAGTTGTG GCACATTCTA GGCATCGCC ATCATGAAAT AAACCTCTGG AGCTGTGATA
TTACAAACGT GAAAGATGA CGAGCACTCA GCAACTTTCA GTGAGTAAAC AAAGGCTTTC
ATTCAGCATG ATTTATTGAC TGCCCAAATC TGGGCTGCTT CCTGTCTGTG GTTCAAGGAG
AGCATAGTCT ACAGAACCCAG AGACCTGGCT ACTCTGGAAG TTAGACTTAA GCCACCCCG
GTCCTTGAAT GGGAAATAT TTCCCTTCAT TCCTGTGTTT TAGGGACAGA AAGATGAGTA
ATGCAGTGAT ACATGCTGGA AATGTTTATT CCACTACCCG AAGCTGCCCTC TCAACTTAAC
AATCCATGAA AGAAACAAGA TGGTATATAA CTTTCTCTAA TTTGTGATGC CTTTGTATT
T _____

FIG. 6A(19)



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T
TTGTTCCGG TTAAAAGAGG AGGTGGCATT GAATGTTTG TTGGGTTGG TTTCTTCTTC
AATAAGAAGC ATCTTAATAT AACTAGACTG GACATCTGTC CCATTTTCAA AAATTACAAG
TTTCGATCAT TGCTAAATTG TACAGATCCC AATCTGCTG CTCTGCATAC ATTTGCATTT
ATAAAGCAG AAGCAGACTA GCAGTCTTTC TAATGCAATC CCCCAAATGC ATGAAGTATT
AGATTGCTTC TCCCTATTGG TTCATGCATT GCTAAAGGCT TAAAAGGATC ATTGATTTTA
ATTATTTAAT GTGTACAGCA GGCTGAGCTT CCTTCTTTT TTAAGGGAAG AACCTTCAGG
GGCATTGCTT TAGTTTTTA ATGTTAAATC TCATTTTTCT TTGAAAATAA GAAGTTAAAG
CTGTATTCAC ACAAGCTCTC AAAGTGCCAG ATTTTCATTG TGTTTTAA CCATCTAGGA
AATGTTTGAT TCTAATGAA CATTACTGCT GAAAATTGGG CTGAAATGC TGGGCTGGAA
ATATTGTTAT AACTTCACAT GATTCCAGTG TTGTATTATT ATTTTTCCT TTTCTTTTTT
TGACCCGATA TAGATGAAGC GAAGAGACAA GGAGCAATCC CATGTGTAAT AGAAAAAGGC
U

FIG. 6A(20)

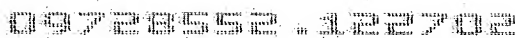


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U
AGCCTGAATT GTTGTGCTG TTTTGTAAAT TTAAGCTGGT TTTTCGATTAA ATTCAGTAAA
TGTCCAGGA CTATAAATGT TGAACATTTT TTACCGTGTG ATTTAAATTT TAGTCTTATT
GTTTTTTTT TTTTGTGATG TTACATTTT CCCCATGGGA AGCAGCTATG TCATGTCGGC
ATGATTCATC ATGGTAACAT CTCGGGTTAT TTTGGTTTGT GTTATGTTCA GAAAGCGGAA
TGCCAAAAAT AAAGAGTGGT TTGTGATGC TAGTGTGTCT TCCTTTAACA AATCAAAGGC
TTTTATTAA TCCACTTAAT GGGACACTGC AGAAATTAA AAAATGAAG TCCCATCCAC
AGAAGGCAGG TACTATGATG TAAAAAGTTT AGGTGGGGA TTAATAGAGT GATCATATAA
TTTATGAGCT AAACCGGAGG CACTTTTTTT TTTGAGATCG AGTCTCACTG TTGCCTAGGC
TGGAGTGCAG TGACGTGATC ACAGCTCACT GCAACCTCCG CCTCCCGGGT TCAAGCGATT
CTCATGCCCTC AGCCTCCTGA GTAGCTGGGA CTATAGGCGC CCACCACCAT GCCCAGCTAA
TTTTTGTGTT TTTTGTAGAG ATGGGGTTTC ACCATGTTGG CCAGGCTGTG CTCAAACCTC
V

FIG. 6A(21)



V

TGACCTCAGG TGATCCGCCC ACCTCGACCT CCTAAACTGC TGGGATTACA GCGTAAGCC

ACCATGCCTG GCCCAGAGAC ACTTTTGAGA GTGAAGAGGA AGCTGAGAAT AATCACTGA

TCTACAAC TGACCATCCA GGGCAAGCCA GATGCCATTA CCACTAGCTA GAAAGCTTGC

CAAGGTCTCA TTACCTTGG TATATAGCAA ATTCTTCTTT TGAATTCTGG AAATTCTGGT

AAGTCATTGA GGTAGCTCTG TGCCAAGGAG CAATATGTA GAATTCTAAT ATTTCAGGCA

GACAACACTT TCCTGCATTT GTAGCAGGTA AAGGAGGTC AGGCAGAAG ACAAAACCAC

TGGGACTCGA CAAAGGGCAT AAACGTCTAA TGCACCTGAT GTAGCTGATG GTAAATTGTT

ATCAGCTAAA GATCTTTTCAT AATAAATAAA CTTATCATTT GTAGGAGGC ACAGAAATCG

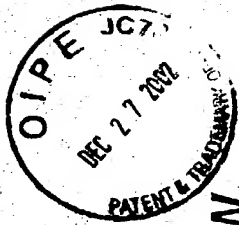
TGGAAGACTG GGATTCAGGT TGCCTGTGGC TTAAATTCTG GAATCAGAAA TATTAGTCAA

GGATATCAGT CTATGAAGTA AGTTTTCAT GTTATATGCC ACAAGATGCA GCTGTCCTAT

TTTCACTCC AGTAATTCTT TCTGAATTAA TACACCTTAA AAATAGCTGC AGCTTCTCAA

W

FIG. 6A(22)



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W
ATCTGTGAGA ATCGTATGTG CTGCTTGCTA CACTTTCCTT TTCCCTGAAGG CTCTTTGAGG
TCCTTCAAGA ACTCAATTCA ATTCAGCAAC AATTAGGGG TCTAAGGTAT ACAGACGCTG
TGCAAGATGC TCCTGAGACA CAAAGAGGAG GTCAAGCCCC TGCCTTCAGG CACCTCTCTA
TAATATAGGA GGAGAAAGAG AAGAAACACT AATACACATA GGAGGTGCC ATTAAAGGG
TACATACATT AAAGCCAGGT GGAGGTGTA AGAAGATTG TAACATGAGA ATTTCTGCA
TGTTTGAAAT ATCTTATAAT TTTTAAAAAT TAAAATGGGA GATACATATA TATGTATTA
TGTATGTATA TATGTATGTA CATATACACA CATATATACA TAAATATATA CATAAATATG
TATATATGTG TATATAGACA TAAATATGTA TATATGTGTA TATATACATA AATATGTATA
TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA GACATAAATA TGTATATATG
TGTATATAGA CATAAATATG TATATATGTG TATATAGACA TAAATATGTA TATATGTGTA
TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA TATGTATATA TGTGTATATA
X

FIG. 6A(23)



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X _____ X

GACATAAATA TGTATATATG TGTATATAGA CATAAATATG TATATATGTG TATATAGACA

TAAATATGTA TATATGTGTA TATAGACATA AATATGTATA TATGTGTATA TAGACATAAA

TATGTATATA TGTGTATATA GACATAAATA TGTATATATG TGTATATAGA CATAAATATG

TATATATGTT GTATATAGAC AATAAATATGT ATATATGTGT GTATATAATA ATGTGTGTCA

TATACACACA TATATACATA CATAAACATT CTGCATTATA CCATTCACCTT TGTAACCCAT

CTTCCCCTAAA AACTGTCTCA TAAAGAGTCT TCTTTTCCCT GTACCTATGC AATGGTAAAGT

AGCAAAAACAC ACATTCTTTT GGGTCCCCAT AACATTCCCT GTAGTTTGCC CTTAACAGTC

TTTGATGTGA AATTACTGT TTCGTCTTA ACCTTGCCCTG TCTCGCGTAC ATGGAGTTT

GGCTCCCTGGC TCCTAGTCTG CATCTTCACC CCATCCCCTG CCCAAAGAAT CTGGTTATGT

GACCACTGCT CATCTTTTCT GCTGCCACAA CTCCAGTCCA AGCCACAAAC CTCTCTCTCC

TGGACTCCTG CGGGAGTTC CTTTCTCTCC CTGCATGAGT CTATTCTCCG CACAACCTGC

Y _____ Y

FIG. 6A(24)



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Y ATAGGTAAGT GAGACTGCGG AAGAGGCAAG TTTGCAAGTC CAGAGGAAAT GAAGACTCTG
CTTGTCACA TGCTGGGTTT GACGGGTGCT GGATATCCGA TGGATGGCCC TTAAGGTGAG
CTCAAGGCTT AAGGAGAGA TAGGGCTGA TGATCTGAGA TTCATCAGTG TGTGGCTGAT
GTTTAAACCC AGGGACAGG ATAAGAAGT TATTCAGGG AGAGCGTAGA TAAAGAAGCT
AAATGGCTTC TGGGTCCTTA GTCATTCAA ATCGGACCTC TGAGGCAGGA GGAAAGCCCA
GAAAGAGTAG ATTCTGGGA CTCACGGGAT AAAGACTTTC AAAAGTGGG GGCTGGCCAG
TGCTGCTGAA GGAAGTAGCA GGACCGGAAC AGAAGGTAA TCGTTGGACC TGGAGAACTT
GAATTGAAT TTTAAGGTTG GTAACCTTAA AAAAGAGCAA TTTTAGATAC CTTTGAAAT
TATTGCAAG ATTGTTTGG TATATGTGTT ATTCCAGGCA AAGGACCAG AAAAGTAAAA
AATACTTACT GAACAGTTAC TGCATGCCTG GCACTGTAAC ACCCTGTTTA ATTCTACGG
CAACCTATA GAGTAGGTGT CATCATCCCC ATCTTACAGA TGAGGATATG AGGTGCAGCT

Z Z

FIG. 6A(25)

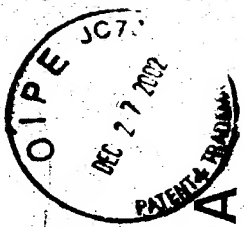


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Z _____ **Z**
AGATTAAGCA GTTTGCCCTCA GGTACACCA ACTGGTTAAC GTAGAGCTAG GATTGAACC
CGGATGGGCT GATCCAGAG CTCATGCTTT AAATCGCTAG ACTGGTGCTC ACAGAAGACT
GGGACCGAAA AAAATTAATA AAAAAATAA GGAGCCCCCT GGGCTAGCAA ATTAGAGTT
G TTCAGACAG ATGTGAAAAG GAAAGCAAGG CAGAGGGAAA GTCACGTGAC AGAAGAGAGA
GACCCATGAC AGCAGAGACA GTGAGCTGGT AAAGTGGCTG GCGATCTAGC CCTGAAAAT
ACCTCCAGAG AGGCAGGCTC ACGCCTGTAA TCCAGCACT TTGGGAGGCC GAGGTGGGCA
GATCACCTGA GGTGAGGAGT TTGAGACCAG CCTGGCCAAT GCGGAAATCC CGTCTCTACT
AAAAATACAA AAATTAGCCG AGCATGGTGA CAGGCACCTG TAATCCCAGC TGTTCAAGTTG
GCTGAGTCAG GAGAATAGCC TGGATCCGGG AAGTGGAGGT TGTAAGTAAAGC CAAGATTGCG
CCACTGCATG CCAGCCTGGG CGACAGAGCA AGACTTTTCT TAAAAACAAC AAACAAAAA
GAAAAAGAA AAGGAAAGAA GAAAGAGACA AAGAAAGAAA GAGAGAAGGA AAGAAAGGAA
A' _____ **A'**

FIG. 6A(26)



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A' _____
GGAAGGAAGA GAAGGAAGGA AGGAAAGAAA GAAAGGAAA GAAAGAAAA GAAAGAAGAA
AGAAAGGAAA GAAAGAAAG AAAAGAAAG AAAGAAAATA CCTCCAGAGA GCCAGGTCTC
TTAGGCCCTC TGAGAAACTC ACATCCCTTT TGATGAACAC AAATGCTTCA CACTCTCAAT
GTTATTGGTA ATCCAAGTTA TCAATATACC TAAATCACTT AGTACTGAAT CTGGCATATA
GTAATCACCT AATGAAGAGA TAAGAGTCAT GGAGTATTCT GAAGCAATTA GAATCAATAG
ACTCAATATA CACATGGCAA CAAAGTTGGA TCTTAAAAAC CGACCTGAGT GAAAAAGGAA
AGGGAAAGAT ACATAACACG GTACCATTAT GTAAATTGAT AATATATGCT TACACAAATT
GTAAGAACAC ATACAAATAG ATACATGTAT ATTAAATATA CTCGAACGGT TACCTATGGG
GTGGTGGCTG GAGTGGGGT AAGTCCGTAA GCTGTAATGG AACCTAAACA AATACATGAA
ACGAGTAGGA ATCAGAAGGA GTAACAATAA AAATGTGCCA TGAAGTGAGG AGTGTAATTT
AATCAACTCA CTGCATCTGA GGTAAAAAT AGAAGATGA TAATTGTTAT TCTTATTACT
B' _____
B'

FIG. 6A(27)

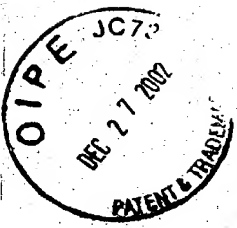


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B' _____ **B'**
CGTAGGTCTT CCACTTGCAC TCAGCTTTAC AATGTTGGAC TATCCTTCAG ATGGCACCCCT
CCTTGCACTT GCTCAGGCAG GAGAGCTTTT TCCTCCAGCT TTCTAGGTGA TTTAATATAT
CAGGGAATAA GTATAAAAAA AGGCACGGTG CTCCCTGGGT AGCCTTTCTG GACTTCAGAG
CTAAATTGCA AAGTCAGTTT TACACATGTG ATTTCACTA TGAAATTAGG GCAAGGTAGA
AAACTGGCAC AGAAAAATG TGATTTATTA TGGTGTACT ATCCCTTACA AGCGAGTGT
CAGCTGCCCTC TTTTGTCCA CTGATTTAAG GCAAGATGAA CTGAAAGTGG CTATGATCAC
GTCCTCAAAA GCACACTCTG GCCCCTCGGC TGCAGGCGCC CTGCACATTC CCCAGCTGCG
TGTCCGGTGG TGACACAGTG CATAATTGTG GCGCCTTCCT GGTGCAAACT GTCTCACTTA
GCTCCGTCTT GCTGGCACAG CAGAAAGGAA GAAATCGAAA ATGTTGGAT TTCAAAGGTA
ACAAGAAGCT GGAAACAAC TACTGGCCGA GTCTGAGAGT TTCAGCGGAG ACTGGTGCAG
CCTTGTGTTT TTCCACTGAC AGCTGAAAAT GAGCCAGCT TCAGTGAAGC TTGTTTCCCTT
_____ **C'**

FIG. 6A(28)



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C' _____ C'
CCCTCCCTCAA GGTACCCAC AATCTCAGT TCTCTCAGGA AAGCCAAAA ATGAATTGA
GGGTTTAGGA TTGTGGTTCT TTTATCTATT ACAGGATTGA TAATATGTTC CTCCACCAGA
TGTTCTGCTT GTAACAATAC TCACTTCCTG AACTACTGC ATATGCAGGA GTGTACTAC
CAAGGTAAAC ACAGAAATTGG CTGCCCAATT CCAATCCCT GAACTGAGTG AGAGAAATCA
GAATTATAAT AGGGGATTCA ACAGAGCTGG CTACGGATGT GCCAGTGGTC AGATACTTG
CTCATCATAC GCAGGTGCTG CTGCTCTAGC AACTGCTCAC TGCTTCATTT CCTGCCTTGG
TCTTTAAATA CTGCTTTTCT CAGCTCAATT GGCTTTCTTC CCTCTGGCAG TCACGTTTCT
TTGGGTCAA CAGCAAATGA TTCTTTAGAA TCACCTGGTA CTCAAAGGAG CTACAAGACA
TTGGGCATCC ACTTCCACTC TCTTGGA AAA ACAATTTTAT GGAAGCCAAG GTTGCCATAG
TGCCCTCTTGA GGTGTGTTGC TCAGCCAAGG CCCAAGCTTT GTGCTTCAA CATGAAATTA
GAGAGCTTCA GAACAAGATC CACATTTTCA ATGGCCTCAC CCAACTGGAT AAAAGAACAA
D' _____ D'

FIG. 6A(29)

D'

TTGCCATATC TCAATGACCA CCTTTTTCAG GTGGGATGGT AGATGCTGGA ATGGGTCACA
GCATTGCCCA ACCAAACTTT GCAAAAAAGG CTGGAAGCTC TGA CTGGGA CCTTAAATAT
GCAAAAGTTG ATAGGCTCTT CATGCAGAAT ATGAACCCCG TGTATGGATA TAGCTAAAGG
GTTGGCCTTT ATGTTTCTAT TCCTTCACAA ACCTGGTAGA ATAGATATGC TTGTTCCCT
TTAAAAAATG TCAACAATTG CATTATGAT GCTGTGTATA GTAAC TCACA GATCATGCTC
CATGAAAATG CTTCAGAACC CAATATAAGG AGATTTTTA GCCATGTGTG ACAAAGAGA
GGCCATTCA GTGTTGAAAT TGTTCAGAGA AGTATTTGAT TATGTTTCT CAGATCTTT
TATTTTATT TTTTTTGAAA CAGAGTCTCA CTTTGTACC CAGGCTGGAG TACAGTGGCT
GTGGTCTCGG CTCAC TGCA CCTCTGCC TC CCAGGTTCAA GCGATTCTCC TGT CAGCTC
CCGAATAGCT GGGATTACAG GCGCATGCAC CACCATGCCT AATTTTGT TTTTAGTAG
AGACAGAGTT TCGCCATGTT GACCAGGCTT GCCTTGA ACT CCTGACTTCA GGTGATCCAC

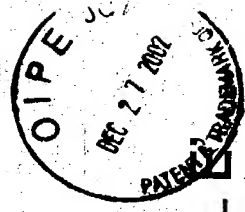
E'

FIG. 6A(30)

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E' _____
CCACCTCAGC CTCCCAAAGC ACTGGGATTA CAGGCATGAG CCACCGTGCC CAGCCTGTTT
TCTCAGATCC TGTATTGTGTT TCTGAAGCCT TCATTTCTAT CTTCCTTATTC ATTTTGAAG
TAGTACACCT AAGTAAGGTT TTTAACAATC AATATCTTT GGAAATTC CTGGTTCCCT
TCTTATTCCCT ACAAAAATAT GTTCAGTATA GCTGATGTTA TGTTTCTTTC AAATTATTCA
TTTCTCTATC TCAGAAATTA TCTCATGCCT AATTGTTATT GAATAGTCTT CACTTCTTGT
CATCCAGTTT CTGGTCTCTT ATTTCACTCT AAGCTAAGT GGCTATTAGA ATAAAGAGCT
TGTAACAGAT TCTTTCTCCA ATATGTCTTA TCTTTTGAAT GCATGCCAGT GACAAACTGT
TAACTGTTTT GATTCTTCAT AACATTCCAC AGAACATGCT GACTCCTCTC TTCCCTGAAAG
CAATGCCCAA GCACAGCATT GTTAGATAGT ATGTACGCAA CAGGGACATG GGTGCATAGC
AAAAACTAGA AGGAAGGAG ACCTTCCTTA GCAATGGGTG ATATGTGCCC TGGACTTAGA
CTCCAAAGG TCGTGAGGTG AAACACACAT CGTCCATACC CAGGAAGCAC ACAGGTGGGA
F' _____

FIG. 6A(31)



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F' _____ **F'**

TGGAAGAGCT GTGCCCTAATG AACTTCATC CACGTGGAGG TGGAGGAGGC TGCAGCTGCA

AGAACTCAGA GCTGCCCTTAC CCAGACCAGG GACCAGGGAG GGCTTTCTGG AGGAAACAGC

CTCTGAACTG CCAGCTGATA GAGGAGCTCT ACCTCAACTC TTCTGGTTCC CCAGGGCTGC

TTTTCCACGT CCATTTATTG GCACTGAAGT TTGAATACCT TCAGGGGCCG GAAAGCCTGC

CAGGTCCCTCT TCTCTGCAGA GCAATCACAC CAACCTGCAA AGGCTAGGA AAGGGCTGTC

ATCATCTCCT ACTCAGAAAC TGGTTCACTG GAAGGACTCA GGGGCCACTG AATACATCCT

GGCAGCTTTC ACAAGAAGG CTTCTGACTC AAGGATGTTT CCATCTTTGC CAGTCCGCCT

TTTCTCCTTC TCTTAGAGTT TGGAGGACGC AAATGTGCTG AGAAGTCAAC CTTTCCCTGCA

AGGTGAGACA CAAGGGCCTT TCCCAGCAGA AAGAAGAGAG CAAATGGAAG GTCCTTCTTC

CTCCAGTAGA GGATGGACTC TGTCTGGCAG CCACCCAACA GGAAAGCAC AATGCATGCC

TGCCTGCTTC CCTCCCTCCC TCCGTTTCTC CCTCCCTCCC TCCTTCCCTCC CTTCCATTCT

G' _____ **G'**

FIG. 6A(32)



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G' _____
CTTCCCTTCC CCTCCCTTCC CTTCCTTCC CTTCCTTCC CCTCCCTCC CCTTCCCTTC
TCCCTCTCCT TCCCTTCCCT TTCCCTTCCCT TCCTCTTCCC TTCTTTTCCC CTCCCTTCC
TTTCCCTTCC TCCCTCCCTT CCTCCCTTCT TTCTTCCCT TCCTTCCCTT CTCATTTCCT
CCCTTCCCTT CTTCCTTCTT TCCCTTCTTCT CACTTTTCTT ACCTTTAGGG CTCTGTCTCT
TTGGAGTCCA TTCTGATTAT GCTGTAATGT CTGCCCTTCT CTCTTCTCTG TCAAAAAATG
AAAGACATGG AAGCCACTTG CCTTTTACTG AATTAAAAAT TAGTAAAGA GCTAAAAAT
AATGGTTAAA AATGTACGCA TAAATTATGC AGTATACTAA CCAATGAAA GATACACTTC
TCTTAATTAA AAGCTGACAG GGAGGGAAC AAGAAAGAG AAACACAAA CAATAATCTA
AATGACCTAT TAGTTGGAAG AACACATCA GAGAAAATAG ATACTGTGTA TAGTCATGTG
TATGTCTATG GAATAACATT TGTAGAGAAA TCTGCACTGA TCCTTCTGA GTAAAGAGAG
CTGTGGGTAC AATTAAGGG AGATTGAAAG GAATCCAAA GCATAGCAGA TGCTGTGCCT
H' _____

FIG. 6A(33)

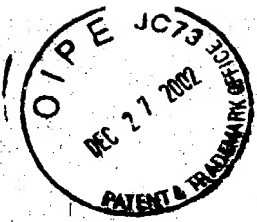


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H' _____ H'
CACTGGAATG GTTGCCGATC TCCTCCAAC TATGAAGTGT TTGAGGCTCA ACTTTAATAT
AATTAAGATA CAAAGACAGA ATGAGAGAAA GAGAGAAGG AGCTCACTGG AAGAACACTC
AAGATTCCCTT ACTACTCATT CTCTAAAATT ACAATTGTTC TAGATGGAAA AGAAAAAAG
CTTCTCTGTT AAAAAAGGAG CTTGTGCTAT AGGAGGTTA AAATATACTT CTGACCCATC
TCCAACATC TAAATCCTTC CCAGAAAAGT ATGCCAATCC CAAGAAATAT TCAATCAAAAT
TGCTGGAAAG AAAAAATACAA AATATTAAAA TGTATTAGGA AGGACACAGTA ATTAAATCAG
AACTGGAGCA GGAATAGACC AGCAGATCAA TGAGACAGAC ATCAAGTCCC GGAATGTGGA
CTTGCAAATG CATTAAGTAA TATGATATGC AATAAAGGTG GCACAGTGAA CCAATGGGAA
AAAAAATTAAT CTTATAATAA TTGATATTGC AATAATTGTC TAGTAATTGG GGAAGAAAT
AAGCTTATTC CTTATCTCAT TTCTTTTTTT CTTTTTGAGA CAGAGTCTCA CTCTGGTAGC
CCAGGCTGGA GTGCAGCGAT GCGATCTCTG CCCACTGCAA CCTTGCTCTC CCGGGCTCAG
I' _____ I'

FIG. 6A(34)



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I' _____ J'
GCGATTCTCC CACCTCAGCC TCCCGAGCAG CTGAACTACA GCGTGTGCC ACCACTCCCG
GCAATTTTT TTTCCATTT TAGTAAAAAT GGGTTTCAC CATGTTGCCT GGGCTGGTCT
TGAACCTCTG GGTCTAGGCA ATCCACCCGC CTGGCCTCC CAAAGTGCTA GCATTACAGG
CATGAGCCAC CGCGCTGGC AGCTCATTTT TTAGACTAAA TAAATTGGAG ATGGCTAAAA
GATTCTATG TAGGCCAACT ATGTTTTTAA AAAGTTTTTT TTTTAAGGAT ATCTGCTGGA
ACCAATCATG CCACCAACCA AAGATGCAAG ACTATAAAC ATACCCAGTT TTTCAAAGCA
TTTAAAAATT ATTCTAAAA TATTTTTTCT CCAGAAATTT TGCATTGATT CCTGAAGAA
GCATTAAAT GGGACCTGAC TTATAAAATG ATGAACTCA TCTCCCCACT CAAGGTAGGA
GTCTCTCAGA TTAAAAAAT AAGCATCCTA GTCCTCTTGT CCTGTAAAA GTTAACCCTT
ACACCTGAAA CACCAGGAGA CTGGCGGTG TTTGCATAGG GGTACAATT AAAGTTGAGC
TACCTCTGAC ATCTATTAAC ACCAAAATTA GTAAACTATG CATGTATGGA GACTTTTATG
J' _____

FIG. 6A(35)

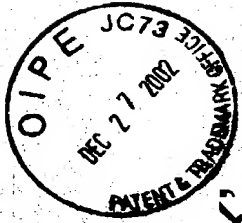


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J' _____ J'
ATTGAACTTG TTTATTGAGT CAAGAGATAT AGTTACAAT GAAATTTGG GGCATATCAA
AATGACCTTG GCTTAGCTTA GCATTTGCTG ATGTTAACTA TTTTCTTCAT TGGGCTGATT
TTAGTTGCTT AGGAAAAATA CAAACACACA CACTTTAAAA TTATATTAAA ATCCCGTCCT
AAACCTCAGA GTCCAGAAACC GCATCCTAAC ACTGGTCATG CATAATATGT TTAAATTTTT
GTGCTTTAAA AACTACAAAT AAGGAATGTA TTAATAGTTC CACAATCAAT GGTCAGTTAG
CCGAGGGAAG ATTAGCATAG TTAAAGACTT AAAATGGCTT TACAACATAT ATCAAAAGGA
CAAAATAAGG GGAACAGAGT CTAGAAATGA GGAACTGGG ACACAGGCAA AAAAAAATAA
TGAGAACTGG GACATGAATA ACGCAAGGGA TAAGACTAAT ACACAAACA CCCCATAA
ATAGCCAGCA TTTGCTGAGC TCTTACTGTG AGCCTGTTCT AAGCACTTTA CATATATTAA
CTCATTTTCAT CCTCAAGGAA CCATCTGAGG CAGGCACTGT TATCATCTCC ATTTACAGA
TAAGGAATAG ACCCAGAGAG GCTGAGCAAC TGGGCCTATT CCACAGCTAC TATGGTGGAG
K' _____ K'

FIG. 6A(36)

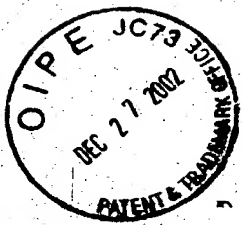


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K' _____ K'
ATGAGATTTA AATCTAATCA TTGGCTCCAG AGCCCATGCA CCCAATGGCT GCACTAAGTG
AATGCATCGG CTATCAACGT TGCCAAAAGT GGGCCACAGC TCGGATCTGC GTTTTCCAGT
AGCCAAAGCA GAGAGTGTGA TCAGACCTCA CTTAATAAG CAAGTCTCAA GCCAGAGAGA
GGTGGTATCA GGCAGCAAAC AGGCTGCTAG TCGAAATCCC ACTTCTTCTC TGAGTGGTCC
ATACAGTTTT ACTCTACTTG CTTACAGAAT GAAAATAGCT GGAGTTCAGG TGC GCCTTTCA
ATGCCCTGTT GTCAGGATTG GGCTTTTCAA GTTTATTTTT TGTTGTTGTT TTTAATAGAC
TGTA CTTTTT AGAAAATTTT TAGATTTACA GAAAGATTGA GAGGATAGTA CAGAGAGTTC
CCGTATACCT CACACCCAGT TTCTGCAATT ATTAACCTCT TACATTCAATG CCGTACATTT
GTTACAATTA ATGAGCCAGG GCCGGCCGGG CACAGTGGTT CAGGCCCTA ATCCCAGCAC
TTTGGGAGGC AGAGGCAAGC GAATCACTTG AGGTCAGGAG TTCGAGACTA GCCTGACCAA
CATGGTAAAC CCTTCTGTA CTA AAAATAC AAAAATTAG CCAGGCATGG TGCTGGTTGC
L' _____ L'

FIG. 6A(37)

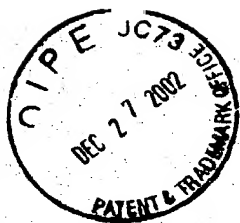


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L' _____ L'
CTGTATTCCC AGATACTCAG GAGGCTGAGG CACAAGAATT GCTTGAACCA GGGAGGCGGA
GGTTCAGTA AGCCGAGATC GTGCCACTGC ACTCCAGCCT GGGCAACAGA GCGAGACTCC
ATCAAAAAA AAAAAAAAAA AAAAGAAGG AAGGAAGGAA GAAAAATTAA TGAGCCAATA
TTGAGACATT ATTATTACTA AAGTCCATGC TTTATGCAGA TTTTCTTAGT TTTTACCTGC
TGTCATTTTT CAGTTCCAGG AATGCATTCA GGATGCCATA CCACATTAG TTCTCATATC
TGCTTAGGCT CCTCTTGGCT AGACTGAGTT TTAATCTACT TTCTGCAGAG CCTGAGAACT
TTAGCATAAT TTCTTTGGAA ATTACAGCTC AATATTTTCA AGCACTTATA CAAACAGCCT
AATGTTACGT TGGCCCATAA CAGTGTTTCA AGGTAATAAA CTTCTTTTGT TTCTGTGCCG
ATTGAAAGAA CTGCTGCCTA GCCTCCTGCC AGATGATGAA CTGGGTACAC ACGAGCATTT
TTCCAGGTAA AGCATATTTT GTGCGACTTC TTAAGCTGCA GCCTTATATG CAATAATTGT
CCATTACAA GACTTATGTT CGAATTTTCCAG GCACTCTGTT TTCACATAACC ATATCCTTCA
M' _____ M'

FIG. 6A(38)



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M' _____ M'

ACTTTGATAA GTACTGCTTT AATCAACTCA GAAATTTAA CTTGACTAAT TTTTTTTCAC

CATCAGTTTT TTTTCTGTG ACTCTTCTC CTTTTTCTGT TTGCCCCAGAA ACATGCTCAG

GATTCTCTCA GGCTTTAAAA AATGAAAAAA TGTTTCTCTG AATCTAGTTA CTCCTTGATT

CTCTTGTCT GTTTATCGCT GGAATCTTG AAAGCTTGGT GTATTAGTCT TTTTTCATGC

TGCTGATAAA GATATACCTG AGACTGGATA ATTTATAAG AAAAGAGGT TTAATGGACT

CACAGTTCCA CGTGGCTGAG GAAGCCTCAC AATCATGGTG GAAGGCAAAA GGCATGTCTT

ACATGGCAGC AGACAAGAGA GAATGAGAAC CAAGGGATT CCCCTTATAA AACCATCAGA

TCTTGAGAGA CTTATTCACT ACCACAAGAA CAATATGGG TAAACCGCCC CCATGATTCA

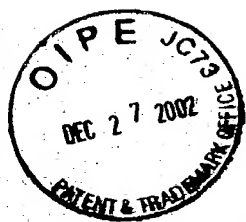
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TGACATTGG GTGGGGACAT GGCCAAACCA TATCACCTGG CCTATAGCAT TATTCCATT

TCTTCCCCAT CCTTTTATC CTCAAACCGG TACAACCAGA CCTCTTTTT TTTTTTTCTA

N' _____ N'

FIG. 6A(39)



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N' _____ N'

CCTGAAGACTG CTCTTTTGAG GGTAGCTGAT AAGTCCAAA TACTGTCACC TTTTCTCAAT

TCCGTTCCCTT CTATGCGCTT TGGAGCAATT GACTGTGTTG GTTGCCCCCT CTTTAAAGT

GTCTCTCACT TGGTTTATG ACTAATGATG ATTTTCTTTT TCCTCTCTAA ACATTCCGCT

ATCTTTTAG CTTCCTTCC CCTCCCATC CCTAAATGT CCTGTGTTCC CAGAATCTGC

CTCACCTCTT TGACTTCTCT ATGCCCTGTC ATTCACTCAT GGGTCTTTAT TACATTATTG

CATCTGTGC AATAACTCTG GTCTTCTGT TAAGTCCAG TCTCCCATTT TCAAATGTCC

CCAGACATTT CCAATTGAGT ATCTCTCAA TGATTTAAC CTGCTAAATA TCTAACACAT

AATCTTCCC ATCAAATCGT TTCCCTCTAA GCTTTTCGT ATTTCCTATT AGACTCCCTGC

ACTTCTCCA GGAGCCCAGA CTTAAACCT TGAATTTCTC ACCATAACCT CTCTTTTGTG

TCCCATAATC AATAGTAGC AAGTGTTATC AATGATTACT TGACAATATC TTTTCTTATT

TCCCTCCCTG CTATGATCAT TCATCTAGCA AGAAGAGTTG GCCCTTTGTA TCTGTGTTT

O' _____ O'

FIG. 6A(40)

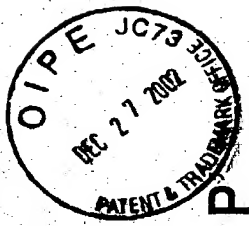


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O' _____ O'
CTGCATCCCT GGATTCAACC AACTGTAGAT GGAAAATATT TGAAGAAAA AGCGTCTATA
CTGAGTATGA AAAAATTTTA TTTCTTGTCA TTATCCCTA AACAAATACAG TATAACAAC
ACAGCATTTA CACTGTAGCG TATAGATCTT ATAATCTAGA AATGATTCA AGTACACCAT
TATATATAAG GACTTGAGC ATCTGTGAAG TTTGGTATTT GTGGGGCATA CTGGGACCAA
TTCCCCCATG GATACAGAGG GACAACTATA TTTACTCAGT GCTTACTAAA TACCAGTTGG
CCAATGTGTT TTTCTTTTTC TGTTTTCCCTG TCTTTAGTTT GCCCCTTGCC AATTAATTCA
ATAGTGCTGC CAATGCCAGG TGTACCTTCA GAATATTCTA TTCTAATTTT GTCATCTCCA
AGCTTAAAAA TATTTAATGG GCCAGGCGCA GTGGCTCACA CTTGTAATCC CAGCATTTTG
GGAGGCCAAG GGGGGTGTA TCACCTTGAGG TCAGGAGTTC CAGACCAGCC TGGCCAACAT
GGCGAAACCC TGTCTCTACA AAAAAGTATA AAAGTTAACC AGGTGCTGGA GCATTGCGCT
GTGGTCCCAG CTAATCAGGA GGCTGAGGCA GGAAAATCAC TTTAATCTGG GAGGTGGAGT
P' _____ P'

FIG. 6A(41)

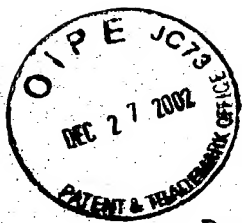


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P' TTGCAGTGAG CCAAGATCTC TCCACTGCAC TCCAGCCTGG GTGACACAGC AAGACTCTAT
CTCAAAACAA CAATAACAAC AACAAACGAAA AACATTTAAT GGCTGCACCT TGCCTGTGAA
AAATGCATT TTTGGCCAGA TGTGGTGGCT CAAACCTGTA ATCCCAACAC TTTGGGAAGC
TAAGGCCAGG AGTTCGAGAC GAGCTGGGAT ATATAGGAAG ACACAATCTC TACAAAAAAA
AATCCACAAA ATTAGTCAGG CTTATTGTTC ATGCCCTGTAG TCCCAGGTAC TCAGGAGGCT
GAGGCAGGAT TCCTCAAGCC CAGGAGTTCA AGGCTTCCGT GAGCTATGAT GGCACAAC TG
CACTCCATCT TGGGTGACAG AGCAAGGTCC TATCTCTGGA GAAAAAAA AAAAGAAGGC
ATTTCTTAGG AGAGTTCTTC TCTGTAGAGT CCTAAGGGTT CCATGGAACCT CCTTAAAGC
ATCAGAGTAT GTGAGTGCAA TGGGAGGAAG CATTAGCCA GAGCAGTTGT GCTCCCAT TG
CATATTAATT TTTAAAAAAC AAAGCTATAA AAAAAAGTTG AAAACTACTA CGTTAGCATC
AGCCTGACAT TTAATGGCCT CGTAAATCAA ACCTTAATTG ACTTTTAGC CAGTTATGCT
Q'

FIG. 6A(42)



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Q' _____ **Q'**
ACTAGCCAAC TACAGACAAC ACACCTTTTA ACCAAATTAG ACTAATAGTT GTCATCAGTG
GAAATCAAGT TTGCCATTCT TCCATGCCCT TGCTCACACC ATTACCTTTT CTGGAATGTC
CTGTACTCAT CTTCCTGTGT TGAACCTCTAT ACCCAACTTT AAAAACCTAG CTCAAAGTTC
AACACTTCCA TTCCATTTC AAGAGAGCTT TCCTCTTCCT TAAAGTTTAA GAACTCATTT
TCATGAATCT TTTTGGCATT TATTGCACAC ATGCTTGCTT TGTGTTATTT GTGTCAGCC
TCATATGCCC CCAAGGTGTT TTAGACTCCT TAACGGCAA AATGATGCTC TAAACACCTT
TCTATCTTC ATAGTGCTTT AGTCTGTTG TGTGCTATA AAGGAATACC TGAGGCTGGG
GAATTATTT AAAAAAGAGG TTTATTTGGC TCACAGTTCT GCAGCTATAT AAGAAGCATA
GTGTCAGCAT CTGCTTCAGG TGAGGGCTTC AGGAAGTTTC CACCCATGGT AGAAGGCAA
GGGAGCAGG CATCACATAT CAAGAGAGGA GAAAAAAG GAAGGAAGAA AGGAGGTGC
CATTCTCTTT CAACAATCAG TTCTGTGGG AACTAATGGG ACAAGAGGCT GGCACGGTG

R'

FIG. 6A(43)



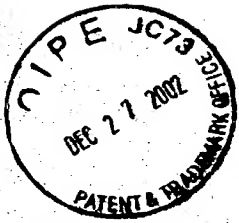
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R' _____ **R'**
GCTCATGCCT GTAATCCCAG CCCTTTGGGA GACCAAGGTG GGTGGATCAC CTGAAGTCAG
AAGCCTGAGA CCAGCCTGGC CAATGTGGTG AACTCCGTC TCTACTAAAA ATACAAAAAT
TAGCTGGGCC TGGTGGCGTG TACCTGTAGT CCCAGATACT CAGGAGGCTG AGTAGGATA
ATCACTTGAA CCCGGAAGAC AGAGGTTGCA GTGAGCTTGT GCCACTGCAC TCCAGCCGGG
GCAACAGAGT GAGACGGTCT CAAAAAATTT TAAAAACTTT AAAAAATAATA GAGCAAGAAA
GCACCAAGTT ATTCAGGAGG GATCCACCCC CAATGACTCA AATACCTCC ACCAGGCCTC
ACTTCCAACA CTGGGGATCA ATTTCCGTAT GAGATTGGA GGAGACAAAT ATCCAAACTA
TATCACATAG TAATGAACAT AGTACCTTAT CTATAGAAAG CAATGGCTAG ACAACTGTTG
AATGGCTAAC CAAATCTGCT TTCCCTATGGT CTCGCTCTAG AGGGGTCAG TATGAGTTTC
TGTCAAAAGG AGAAAAAAA ATGTATAGTC AGTTTGTGT GTGTGTGTGT TCATGTAAAA
GAGATCAAGA GAAAGAACA AGAGAAATCA TGAAGAAGGAG GGGGAATATA AGAATAATAC

S' **S'**

FIG. 6A(44)



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S' _____ S'
ATAGAAAAA GCAAATTATC TTGTTTATCA GTAATACCCA AGGGGGTAGA AATGGTAAGT
AATAATCCTT CTTCACTTTG TCTGTAGTTC ACTTTTTC ACCTTTTATT TGATGAATTC
ACATCGAAGA CATTAACCTA TTAAGGCTTC CAATATTTT GGAGATAAGA AGGGCTGCTA
TGCTCTTTAT AGATGGAAAA CTTGGGTCAT TAATAACTCA AACAAGGACA TAACAAAGAA
ATGGAGCATA AACTGCCAGG TCCTGACTGT AGATTGGAT TCCCAGTTGG TGTCTGTCA
CCCTTTGTTA CTCCTCCTAA AGTTATGATC TTTTCTTGTG CATAGGAAAT TCATAGTGAT
TTCCCATCAC CCTTGGGATT ATCATAGCTC CTTTAAGGTC CCCTCTATGC ACTCAATAAC
ATCAACAGTA AGTGTCTTC GAGCACTTAC TGAGTGTATA TCATTGTGTT CTCACGCAGC
ACCCACAGAT CTCACCAAGA ACCTAGCTGA AGCCTGTAGA ATGAATAGGT AAGTACTGCC
ATGCCAATCT GGAGTACTCA AGCGATGCAA ATGATTCCTT TAATTGTACT TTTCAGGCT
TGTCAGTTTT GCTCATGGAG AAGTGGCTAC TGCATCCATG TTATATCTAT GTAATGTTGG
T' _____ T'

FIG. 6A(45)



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T' _____ T'

ACTGCCAAGC ATCACTTGAC TTTTTCACAG CAGAAATTAC AGCTGATGAC AAGCTGCTGC

TGAGAAAATG GATATTTTC TGAATTCAGT TCTACGTGGA AACAGCTGAC TAGTTTCCAT

TGCTGTAAGA ATGGCTCTTT TGCTCTTGGT TGATTTTGAG TAATGGCTTT ACTTCTGTAG

AAAGGAGATT TCATTTGAAG TCCACTCAGG GATTTGGTTC AACAAACTGG AGTACAGGTT

TCAGAAAATA TCTCTTTAAT CCTCCAATAA TAAATTTTCT CATCTATAAT TCCTGGAAACA

CTTCATCCTT TGCAGCCGAG CATATAGATA GATTTGTTC TCACTGTGTT CTGATTGCCA

CTTTGACCTG CTTTTTCAAC TTAGGTTACA AATAGAACAG AATCTCTCTG ATTTTCTCA

TTAATTGTTT GAATTCCAC TTTTCCCTCAT TAGCAAGAAG TCCAGTATCT TCCTGAGAAC

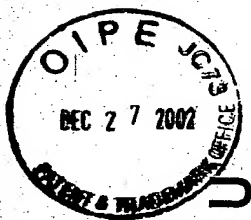
TTCCCTTTTCT CAATCTAGGA ACTTACTTGG TCCATAAGGT AACAGTCTTA TTTCTGACTA

TCAAGGAGAG AAATAACAGG AGCCATTATC ATCTTCATGG TGTCACTTTT GAAAACCTGGT

CCTCTGTAGA TCTTCAGATT CTTCGGTTAG TCCATTACAG TGCTATAACA AAATTGCATA

U' _____ U'

FIG. 6A(46)

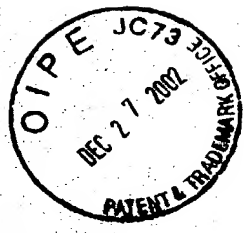


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U' _____
GACAGCATGG CTATATAATA ACAGAAATGT ATTTCTGACA GTTCTGAAGG CTAGAAAGTC
AAAGATTAAAG ACACTGGCTG ATTTGGTGTC TGGCGAAGGC CCATTGCTC ATAGATGGAC
GATGACCTTT CACTCTGTCT GCACATGGCA GAAGGGCAAG AGAGCTCTCT GGGTCTTTT
TATAAGGGCA CTAATCTCAT TTTTGAGGAC CCTGCCCCCA TGACTTAATC ACCTCCCCAA
GGCACTGTCT CCCAATACCA TCACCTTGAG GGTTAGGATT TCAACATATG ATTTTGGGGG
GACAGAAACA CGCAGTCCAT CTCGCTTGTC CACTCCATGG TGGTATTCTT GCTGGATCAG
TTTCCTCCTT GGGTGCAAT TGTGTTCCAT GTCTAACTG CAAGTTATAG CAGGCCCGAT
AGCAAAGTAT TCCAATGTTG GTATGCAGAG GCATTGAATA ATCAGAAATGA ACCCACGCCA
TAAACAACTG GTAGAGCTGC AGAGAGTACC AGCTGATTAT GAGCCCTGGG TAACAGTGGT
TTTTAGTTCC TATGTCCGTC AGCCCTTTTC TCCCATAGTA GCCCCTACTGT GTTGAAGTGG
CTGAATCGAC AGAAGCTTCC AGCTTGGGCC ACATGCTCAT GGAACCAATT CTCCTTATGA
V' _____
V'

FIG. 6A(47)

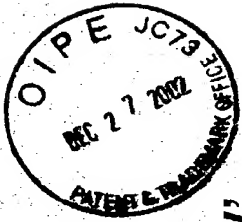


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V' _____ V'
GCCGTACAAG AGCTGGGTTG CCATTCTGGA TACCCTCTTTT TTTCAGAGA TTTTATTCA
AGGATAATTTT TTCTTTTATC AACTACAGGG ATTATTAGA ATCTTAGGGC AGTGGTGCCC
AACCTTTTGT GCCCCAGGGA CAGGTTTTGT GGGAGACAGT TTTTCCATGG ACCAGTGTC
GGGGGCTGGG AGGCATGGTT TTGGGATGAG TCAAGTACAT TACGTTTGTT GTATACTTTA
TTTCTATTAT TATTATATTG TAAATATATAA TGAAATAATT ACACAACCTCA CCATAATGTA
GGAATCAGTG GGGAGCCCTA AGTTTGTTTT CCTGCAACTA GACAGTCCCA TCTGGGGGCA
ATGGGAGATA GTGACAGATC ATCAAGCATT AGATTCTCAT AAGGAGTGCT CAGCCTAGAT
CCCCGGCATG TGCAGTTCAC AATAGGATT GCTCACCTAT GAGAATCTAA TGCCACTGCT
GATCTGACAG GAGTGGAGC TCGGGCAGTA ATCGAGGGT TGGGGAGCAG CTGTCAATAT
AGATGAAGCT TTGCTCGCTC GCCTGCCACT CACCTCCTGC TGTGTGGTCC ACTTCCTAAC
AGGTCACAGA CTGGTACTGG TCCATGGCCA GGGAGTTGG GACCCTGTCT TAGGGAGTAG
W' _____ W'

FIG. 6A(48)

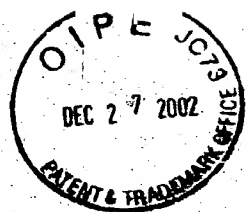


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W' _____ W'
GGGTGGAGTT CCTTCACTT CTAGAAGGCC CTGGATTAGT ATCCCAGAGC TGTCATTACA
GAGTATCACA AACCAGGTGG CTAAAAACAG ACATGAATTC TCCTTTATTT TTGATGGCTT
GGAAGTCCAA AGTCAAGGTG CTGCCAGGGC CATGCTCCCT CTGAAATGTG TAGGGGAGAA
TCCTTCCTTC CTCCTTCTAG CTTCGTGGTG TTTGCTGGCA ATCACTGGCA TCGCTTGGCT
TGCAGCACTT CAACATCTGC CTTTACTGTC TCATAGTGTT CTCCCCTCAT GTCTCCAGGT
CTCTCTGTCT CTCTTCTTTG TATAAGGAAA CTAGTCATAT TGGATTAAGG GCCAACCCTA
CTCTAGTATG ACCTCATCTT AAGGTCACAT GCAATGACTA TTCCAGATAA GGTACATTC
TGAAGAACTG GGAGTTAGGA CTTCATATCT TTTGAAGGAA CACAGTTCAA CCAATAACAG
CCCCGTACT GTTTTACAAA TAGGTATTCC TCTCCTTCCC AAAGTTCTTC ATAGCAGAGA
CAACTTGTA CAAAAGGCAA AATACCTTAT TATGTAACCT TAACCTAGGA TCATAGATCC
CTACTGTCTG GTGCTTTATA AGCACAGAAC CACCGGGAAA TCATTATTAA GACAAGGAAA
X' _____ X'

FIG. 6A(49)

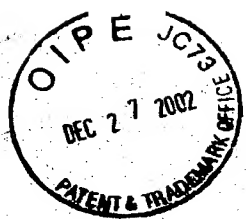


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X' X'
GGCCAAAGTGC AGTGGCTCAT GCCTGTAATC CCAGCACTTT GGGAAATTGA GCGAGTGGA
TCAACCTGAA GTCAAGAGTT TGAGACCAAAA CTGACCAGCA TGACAGAACC CCATCTCTAC
TAAAAATACA AAAATTAGTT GGGCATGGTG GCATGTGCCT GTAATCCCAG CTAATCAAAA
GACTGAGGCA GGAAATCAC TTGAACCGAG GATGCCAAGA TAGCAGTGAG CCAATATCGT
GCCACTGCAC TCCAGTCTGG ATGATAGAGC AAGATCCTGT CTCAAAAAAT TAATAATAA
ATAAAAAGAC AAGGAAAGCC TTTTCCAAGG AGACCCCTTCT GCTTTGCTAG TTCAGAGAAC
TTCTCTTTTG GAGAAACAA ACACCCAGTC CATTAGCAGC AACGTCAGG ATTGAATTCT
TAGGGCAGCA GGCTGGGCAC AGTGGCTCAT GCCTGTAATC CCAGTACTTT GGGAGGCTGA
GATGGGTGGA TCACTTGACA TCAGGTGTC GAGACCAGCC TGGCCAACAT GGTGAAAACT
CATCTCTACA AAAAATATGA AAAAAAAAAA AAAAAAAAAA GCTGGGTGTG TTGGCTTATG
CCTGTAGTCT CAGCTACCTG GGAGGCTGAA GCAGGAGAAT CACTTGAACC CGGAGTTGG
Y' Y'

FIG. 6A(50)



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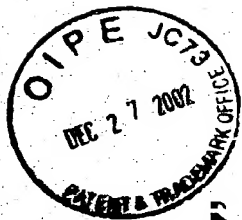
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Y' _____ Y'

AGGTTGCAGT GAGCTGAGAT TGCCCTACTG TACTCCAACC TGGGTGACAG AGAGAGACTC
CATCTCAAAA AAATAAAGAA TTCTTCGGGC AGCAGTCTTT CCTCCACCTC ATAGACCATG
GAGGTGAGCC AGCTCTGACA AACCATGAGA ACAATGGCAG AGACATACCT GTAACGTAAC
TGA CTGGGC AAAGACAAAG GTGAGGAAAA TGACAAGTTT GAGGAACTAT GAGACCAGGC
AGTGGGAAC ACCACTAGCA GAAATGATGG AAGTTCTCAA GAATAACAAC AGAGAAATAG
ACCATGGCCA GAGCTAGAA CCTCCAGGG AAAGGAGATG GGCTCCAGAG GCAGAAGAGG
ACGTTGAAGG GAATGGGGAG TGGTGAAAT ATATAGACGA TGGGGACCAC CCAAGAGCAG
TCGCTATTGC AAAACTGAGG AGAAGGAGAG TCTGGAGGGG GTGGTGGAA GCTGGGTCTC
CTAAGGAGGT TTTGACAAAA GCAGTCATGG AGCGGGCTTA GAAATCACAG TTGGGGACAG
GGTAAAGTTC CTCGGGATAT AGAGGATGAG ATTAGAAGAG GTTCCAACTA GGTAGTGTG
GAGAAAAGCA CTATTGACCC AAAAAGGAAG GAGAATGTGG GTGGAAGTGG CAGAGAAAGA

Z' _____ Z'

FIG. 6A(51)



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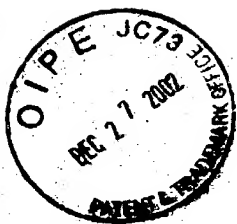
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Z'

GGGGTTTGAG CAGAGAGTGG TGATTTTCT AATGCAGAGT TGTGGGAGGT GGAGTGCAGG
GAGCCAGGCT GGGTGGCTGT GCTGATGTGA TTAAGCACTT ACTGACTGCC AGGCAATGGG
CTAAGTACCT GAGATGCTTT GTCTGTTATC CCTCCCAGAA CCCCTCTGAG CAGGTGCAGT
TATTATTCTC ACTTCACAGA TAAGGAAATT GAGGCACAGA GAATTGAGTA ACTTACCCAA
GGTGACATAG CTCATATATG GTAAAGCAGG CTTTGAACTC AGTCTAGCTC CCGAACCTAA
GCTTGTA ACTATGCTTT TCCCAAAAAA AGGGGGCTGG CACAAAAAGA GCTGAGGGGG
CTGGGCATGG TGGCTCATGC CTGTAATCCC AGCACTTCGG GAGACTGAGG CAGGTGGTTC
ACCAGAGTTC AGGAGTTCGA GACCAGCCTG GTCAACATGG TGAAGCCCTG TCTCTACTAA
AAATACAAA ATTAGCTGGG TGTGGTGGTG TGCACCTGTA GTCCCAGCTA CTTTGGGAGG
CTGAGGCAGG AGAATCGCTT GAACCCACAGA GCGGATGTT GTAGTGAGCC AAGATCATGC
CACTGGACTC CAGCCTGGGT GACAGAGTGA GACTCCATCC AAAAAAAGA AGAGCTGAGG

AA

FIG. 6A(52)



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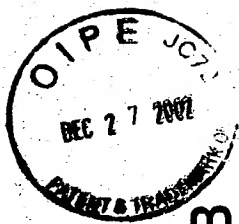
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AA AA

TGATGCCAC CATCAGCATC AGCCTGGAAG TTATAGCAGG ATGCTAAGTT TCTCTAAAGC
TGCTTTTCTT AGGACTTGAA AAAGATAACT TGGGTTTGTA TCCCATCTCT GCCATTAGTA
GTTTACTGCG TTTGGATAAA TTA CTTAGCC TTA CTGAACC AACTTTGGAT TTTTATAGAG
ATACTGTAAT GAAAGGAATA AGGTATCAGT CTTAGCAGAG CATCCAGAGT GTTCCCTATTA
AAACCTAAAT CATATCCTGT CATTGCTGTG CCCCAAACCA TTCAATGGCT TCCCAACTCA
AAGTTAAAA CTCATCTTTC CAGTGGCCTG CAAGAGCCTA TGCTATCCGG TGTCTGACCT
CATCTGTTGT TCCTTTCTCC CTCCCCTTCT TGGCTCCAGA CGCACTCTGG TCTCCTTGCT
GTTCCCTTGAA TACACCAGGC AACTCTCTT CGCCTGAAAC ACTTTACCC AGATATCTTA
GCTTACTCTC TGCCCTCCCTC AATTCAATGA TGAAATGTCT CAGTGAAGTC TTCTCTCTCT
CCTCTGTAAA AGTATACTCT CTGTTCCCTT TCTTTACTGT TCTAGCTACT ATTGCTGTGT
AACAAATCAC TCCCCAAATT TAATGAGTGA AAACATCAGC CATCATCTTA TTTCTCACGG

BB BB

FIG. 6A(53)



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BB BB

TTTCTGAGG TCAGGAATC TGGAAGGGCT CAGCTGGGAG GTTCTGGCTC TATAATCTCT
TATGCAGTGA GAGTCAGATG CTGGCTAAAA CTGAAACAAA GCAGGGTTCT AGTAGCTGAG
GGCTGGCTGG GTCTCTCAGA TATAGTTCAG ATCTCCTCCA GGGGTCTCT CCACGTGGGC
TAGTCTGAAC TTCTTCACAG CATGGTGGCC TCAGGGCAGT GGA CTCTGCA TAGTGGCTGA
AGGCTTCGCA GCTGAGTATT CCAGCAAGCA AAGTGGGAGC TGTATTGCCT CATATGACCC
AACCTTGAA TCCACACAGC ATCACTTCCG TGTATTCTAC GGGTTGAAAA GTCACAAAAA
CCAACCAGTT TCAAGGAGAA GGAACAGAGA TCACATTCT CAATTGGAGA AGGTCAAAG
TCACATTGTA ATCAGAGCCT ATGGGATACG AAGTATTGCG GTCAGGTATG AAAAATTGTA
TTTGCTGCAT CTGCTTTACT TTCTCCACAG CGTTCATGAT CTGCTTCTCA CATGATATTG
ACTTACGTCA TTTCTGCGTT TCCTGTCTTC CACACTAAAA TGTACGCCGT TTTTGTTCAC
TGCTGTATCC CCAGAGCCTA GCACGGAGCC CAGCATGTAG TGGTATCCAA TAAATACTTG

CC CC

FIG. 6A(54)

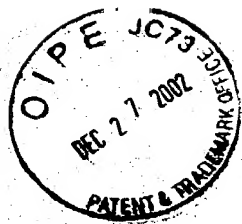


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CC _____ CC
TTGCATGAAT GAATCTGTC TTTTAAATCCT AGCTATAGGT TTCTAAGTTA AATATTACTA
TAATCATCTT ACAGACGAGG GAAATGAGGC TCAAGAAGAT TTGGTAACTT ATGCGGGATC
ACTCAGCCAC ATAATGGAAG AGACAGCATT GAAGTACACA TGCTTGCTCT GTCTGCTCTT
CCAAGCTGCT CATCACACAG CTGCACCTCT GAGGACTTCC CTCCCCAGTC CACCTCCACC
CTTACCCAGA GACACACATG GCCACAATCC ACTAGCAGAC CAAAATTCAA TTTTTCCTCCA
GTTGGTTGCA CTCAAGCTGA GAGCAAAGCA ATTGCACCTT AAATCCCCTT ACAGCAGATA
TTTCAGAGCA TGTTCGGAAG AACCCATCAC ACTTGGCTTT TAGATCTTAT TTCTGGTTTG
TTACAAAAAC ACAATTAAAT GAAAGGTTAG GTAGCTTTTG AATGGCCAGC TCAAAGTTT
GGCTTATTTT TGCCTTGCTG TCTTTATAGG CATTTTACCA ATATTATCA CTATTCCCT
TAGGGAACCC TTAGATCTGT GATATTGAA ATAATAAAGC CTCCTCATG GCCCTTTAAA
AGGTTTGTGG TAAACCACA CCATTAACAT TCACAGTTCC TTATTATGA GGCCTGATG
DD _____ DD

FIG. 6A(55)

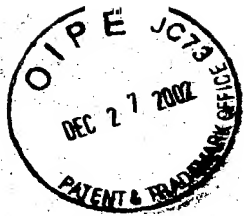


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DD _____ DD
CACTTATTTC CATATTTCCTC ACTGTTTCTC CGATGAGGAT TTCACATAAT AGTGTTTGAA
GGCTAAAGAC TTCAAAGCAG ATTCTTTTACT ATTTTATCT TGAAAAATAT TCAATATTG
TGTAATTAAA GTGAAGTCTT CCTAGAGAAA ATGACAACCTC AAATAATCTT AAATGTACCT
CCAAGAAAA AGCTGTCAAA GTGACATTTA GTAATAGAGT CACATTCTCT AAGGCCTTTG
CTTCTCCTTC TGATTCTTAT CATCTTTGAA GGTTATGTCA TGGGCTGACT TCAAATCAAC
TTTTAAATTT ATTATGGCCT TCTTTAAATG TGAGTTCTGA AGTGAGGGG CTTTATCTTT
CTTTTGCTCC AGATTTTTTTT TACCGCGTCA TTACCAAGCA TCTTAAAAACA AAACCTAAAA
ACAAAAATCT TCCTTGACCT GGTTTTTCCC ACTAGCTAAC ATCCTATTTT TATCTTTCCC
CTTTGCACTA AAGTTTTTTA AACGGATCTT TATACCCCTCT GTCTCCATTT TCTCATCTGC
TAACTTATAT GGCAAAGATT ACCACTGCCT TTCAACATAA TTGGCCAATC TACAGAAAGT
TTTCAAGTTC TCTTTTAAAT TGACCACCTC CTGCCTACCT CCCACCTTT GACATCTTGC
EE _____ EE

FIG. 6A(56)



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EE
TTCTCACTTG GCACCTTACC CAGTGTTCAA GATCCCTCC TTTAGGATGT CTTCAGAGCA
GCTACACAGT TGGTACTATA ATTTATACAT CCTGTACAC AGGCTTGCT GGGATATTGA
TGGAGAGAAG GAGGAAACTG GAAGTAGTTC AGGCCAGAGC TAGGGAATT GACCCATCTC
CAGGTCTCAG GTCTGCAAGG GGAGCTCACA GCTTAACACA TGGAGTCTAG AACTTGTC
TGGACCTTGA CCAACACCAG CCCATGGAGT CCAATACAGT GCTCAATAGG GATTCCAGG
AAATTGCTAT ATTTATTCAA AGAGAACTTA CCAAGTGTC GCTACGTGTT GGGCATTTGT
CTAGGCACAG GGACCACAAA GATAAGACAT TGTAGCTTTC CTTAAGTTGC TCACTGAGTA
AATAGAGAGA CAGAAAGGTA AACAGGTAAG TGCAAAAATA CATACAATTC AGCAATAGTG
TTCATAGTGG CTATGGAGAG AACGCTCACT AACTTTGTTT AAACAGTTGT TCCTTCAAGG
ATTTGACATG GATTGATTG GAAAAGCATG ATACCATTTT TTGCAATTAA ACACAGGAAT
ACATAAATAA AATGCATCAG TATTTTAC AAATAGCTAC TAAGAGCTAC TAGAAAACCT
FF

FIG. 6A(57)



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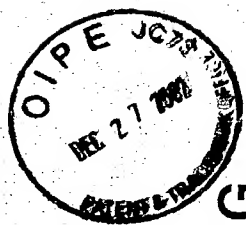
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FF

GGGAATTCTT AAAACCTTAC CATGCTACTT GCTCTAAAAT ATTTTATTTT ATGTTATTTT
GTACATTCTT TTACCTACAC AACACCACT GTTTTCTTCA TTTCTTAGTC TATTAAACC
TCACACCCTT TCAGCATCTC TTAATTATTT ACTACCATCT GTTAGTTCTC CTGTCCTGAA
TGAAACAAAA ATGGCAGAAT GTAAAACGAG GGCGAACAGA TTTTGGACAG GAAGTATTCA
GAGGTAGAAG GAAATAGTCA AGACACATAT GATAAACGAA AACATAATA ACTTTATACA
TAACAACCTA TAGACACATT TAAAAAGTTT AAGATCTCAA GAGCTATGTC TGAATAGATA
GGAGTAAAAA CTCTATTAG TAATTAGGAA AATAACAAGA ACAGTGAATT TCTTAATGAA
TGGCATGTAA TCAAAACTGT ACTTATCGTC TAATTCAATA TCTTGAATGT TTTTATTTTA
TTTATTATT TTTTATTATT TTGAGACAGA GTCTTGCTCT GTCACCCAGG CTAGAGTACA
GTGGCGTGAT CTCAGCTCAC TGCAACCTCC ACCTCCCAGG TTCAAGCGAT TCTGCTGCCT
CAGCCTCCTG AGTAGCTGG ATTACAGAGG CCTGCCACTG CACCCGGCTA ATTTCTGTAT

GG

FIG. 6A(58)



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GG _____ GG
TTTTAGTAGA GATGGGGTTT CACCATCTTG GCCAGGCTGG TCTTGAAGTC CTGACCTCAT
GATCCACCAG CCTTGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCCA CCAGCCTGG
TCGAATGTCT TTATTATTG AAGAGACAAC ATGGGCCCTTA AATCTGTCTT CTATTGACA
GACTTTGATG GAGTCAAATC CCAATGCTGC CACTTACTGA ACGGCCCTTA ATGACTTAGT
CTCTCTCAGC TGTCTTTCTG CATATGTAAG GTGGAATAAT GATGGCTTTC AAGGAGGAAT
AAACCTATGA AAAGTGTTGA GGATAGTGTT TGATATGAAA TAAGGATTTC AACAAAGTAGT
AGCTGCTATT GAAGATTTAA GAGTTATTTA TTACAACCTAT TTAATAAAAT TTTAAAAACT
AATACACTTA AATTATTAAA GAGCTTTGAA ATGGGCCAGG CGCAGTAGCT CCTGCCTGTA
ATCCCAACAC TTTGGGAGGC CAAGGTGGGC GGATCACCTG AGTCAGGAG TTAAAGACCA
GCCTGGCCAA CATGGTGAAA CCTGTCTCT ACTAAAAACG CAAAAATTAG CCAGGTGTGG
TGGCATGCAC CTGTAGTCCC AACTACTCAG GAGTTGAGG GAGGAGAATT GCTTGAACCT
HH _____ HH

FIG. 6A(59)



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二

AGGAGGTGGA GGTGCAGTA ACCGAGATG TCACTGCACT CCAGCCTGGC AACAGAGCAA

GACTCCATAA AGACAACAAA AGCTTTGAAA TTGTGTAAT GAGTGTACC TATCTTCATT

TAAGAAATTC ATCTTTGTC ATTTATTTT ACTTGACATG AGAGCTTCCA GCAATTTTAA

ATTAAGCCCT CACAGATTTT ATGCTACTGG CTATGTGATA AACAAATTAT TTGCTAAAAAT

AAATATTCTTG CTTCCTTTTT AAGGAATTGT CTCCTAGAA ACGTTTGT CCAACAATA

CACTGACTTT ACACAAATC AGATCTGATT GGCAACAGTT GCAGATGTTT TCAAAAGATT

TTCATTGAG AAGGGCCCA TTTGGGTAT TTAGATTCTA AGAACTGAAA CTGCTTTTGT

CTGTTTTTCT GGCTTCTGGG AGAGGAGGAG ACATGAATTC AGTTAGCACC TTGGTATTTTT

CTTTATCCTT CATTCAATA CAGAAGATGC TTCATATGCA CAGTGGTGC AGTCACATC

AAAAGAAAGA GAAACAGTTT CTTGGTTTTT AATTTTCAAC CGAAAGGAA AGGCACCCAT

TTTGTTCCGCTCTAATTAGCCAGTGCATGACTTAGAGAGCAGGCAGATGCTTTGAAGCGC

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 3. **Results**
 4. **Discussion**
 5. **Conclusion**
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 217. **Figure 210</**

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FIG. 6A(60)

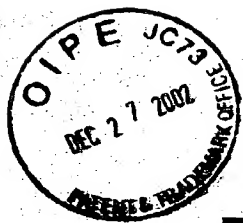


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II
TGGTAACACA GGTCTTCATT AATCTCCACG CAGACTGCG ACTTCTACTA TGCCTAGGCT
GAAGAAAATG GCTCAGGAAG ATGAACAATC TCACAGAGCC CTAACATACT GAAGCCAGGT
GTTATAAAGC ACAAGTCAAG AGGGTGAGAA ACTAACGTC TTGAAATCTC CCACTTCTTT
CTACGTCAGA AGAGCCAAGC TGATTATTTT AGTTGGAATT TAGAAATTTT TAAAAATTAT
TCTAAAGTCA TGAACAAGCC TAATTATAAA GATAGTTGCT GTGAAGGTGC TGAAATAACT
CGATTTTACC AACCCCTCT TCTGGAGGAA GCCATAATGG AATCCTGTAC AATGTTCACT
CTACCAACGA ACTCTTGTTT TTCTAATGAG GAAACAGAGG CCCACAGTAT TAAACTATCT
TAACCAATAC AAAATGACTA GTGCTCTGGT CCTTTTATTA AGCACTAAAA TTTTGATCCA
ATAATAATC TGTCCATTAG AAGAGTTTC CCTAATGTAC TGGTCTAAC TTGTTCCCTT
CAAGGGCCA GTGTCCCGTA CACATAGCTA AATGGACTT CTCTTCACT ACCATTACCC
AGAGGGCAGA ACCTAAAATG CTGTGAATGA CATTCTGCTG TTCACATCTC AGCAGCA
JJ

FIG. 6A(61)



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JJ
GTGTTGCATT TGAGCTTCTG CAGGGCCACC CAGGACCTAT ATCTGCTCAG ATGTTTAACT
CATCTAATTC AGTGAACACT TCATTCTAGT TAACTGAACA TCTACTTTGT ACAAGGCACT
ACAGCGGTTT AGAGATGAAT AAAATCATGA GATTCCACTG TCTCCTATAA ACCATCACTT
TGGGAAATTT TAGAAATGTG GGTAAGCTCC AGGCTTTCCT GCAGCGTAGA AGTCACAAAC
TCAAATGCCT GCAGAGGCC AGCTGACAAC ATAAGTAAAT GATTCTGGCT GGGCGGAAAA
CAATTACGG TGGGTGGGTT TCCAGCTGGG GAGTGCACGC CTGTGTATAA GGACAGCTGC
TACTCATTC CAGCCAACTG TGTTCCTCATG TAGAACTGCG GCCCAGTGTA GCCAGTACCG
AAGATTCTC AGAAAAAGCC GGAGATCTCA ATGTTAGTGT AAAATCTCTC AAATTTCCAA
GAGGATTATA TGGGGCAAAG GTTCTCAGAT CAGTTGCAG TCTCTTACTT AGCCCATGTG
CAGAGCAGTC GTAGAGGGTA GCATGCAGTG TCCTACATAA TAATTCCTTT TTATTTTATT
TTATGCCTC CTCCTTCCTG TCTCTCTTTA ACCTTCTTC TTCCCTCAGG CTGGCTTCTT
KK

FIG. 6A(62)



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KK _____ KK

CCCTCAGCCT CGTCCGACCC CAGCCTGGGT TCAATGAACA TTCGGTAAAG GAACACGGAA
TGTC AAGCGC ATTAGAGACA ACCTTGAGAC ACATTCCCTCT TCGGGTAAGC ACTTCACTGT
AGATTTTAA TTTTAAACAA GACAATGTTT ACGACTTGCT TCTTTCAGGG AAGAGCGATA
TCAATTTAG TGAACACTTC AAGGCTGAGA TACGCTAGGA GAGTCGTGTG GTGTTGCACA
GCAAAGAATT CCACTTTGAA GCGAGTGGA AAAAAAGCAT CAAATGCCAC ATGTA ACTCA
CCGCCTGAAG GGTACATTG GTATGAAACC TGGGTTTAA AAGGACCGA ATAGACTAGC
CATTAAAAGA CCTGCGTACA ACCTCTCTCT CTCTCTTGA GAGATAATGT ATCTGGACAA
TAAACATGAA CAGAGTGGAG TCTATCCTGT TTAAACACATT GCCTACTGTA CAGGCACCAG
GAGCTGAAGG GTCAGAATAT TAGCAGTGGG AGCTTGATTA GAGTTGATGA GAGATGGTA
GTAGGAGGAA AGAGTGAGAT AGAGGAAGAG GACATGGGGG TTACCCATAA GTGGAGATA
GAAAAGTAGA ATCAGCTGGC CATCAAAGGG CGTGGGACTG AGGAACAGTA TGGCATGTAT

LL _____ LL

FIG. 6A(63)



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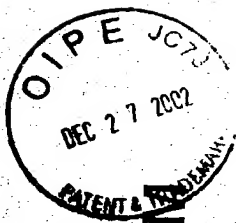
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LL
TAAATATACT AAGCGCTGAC ATTGGAGGAG AACTAGGAAG TTAAATGAAA TCAATAGGGG
ATGATGGAGA ATAGTTAGGT GTCAGGGAT TAGGGTTATG ATAGAAATAC ATGTGAATAC
ATGCAGTATT GTCCTGGAAT ATGGTTAACA GTTGGTTCTC CTGGGGGGTG AGGGGAAGCC
CTGATTGTA ATATTGCCT ATTTCTGTGG TGCAATACT CCCACCATGA CCAGTTTCAA
GCTATGAATG TTGAAGTCAC AGAAAGCAGG TTGGGAGGAG ATGCCGCACAT TTGTTCCCCG
GCAAGGTGGA AGGTAAGGAA GGTGAAATCA ACAAGGTCAA AGAAAACTCA AGATTTCGAG
GTGCCCTCAGG TCTGAGGGC AATGAAGTCT AGGAATGGCT GTGCTGAGGT AGCTGAAATA
GAAGTGACTG CAGAGGTCAT GAAGCTGAAG AGGTGAAAAC AGAAATTAGA AAGCAAAC
CCCACCGCC AACCCCCACC CCTGCAGCCA GTTCTCTGAGG GTGACAATAG AGGAAAGGT
GGAGATGAG TTCAGGTCCA GAAGCCATAG AAGCGAGTGT GACATTGTGC TCAAGGTCAG
CACATGTCAG TGTGGGGTGT CACATGCTGT TGTGAACCAT CATTATCAC CAATTATGGA
MM

LL

MM

FIG. 6A(64)



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MM

MM

AGACCTCCTA TGGGCATCTT GCCATATGCA TTATAAGAT GTGTAAGAAG ACATTTCCCT
C CACTTGGTG AGGAGAAATTA GGGCTGTACA CAGATACTGT AGAGTGCCAT GTGCCCTGGTA
CAGATAAGGT GTGTTAGAGG TTAAAAGATG AGGCTCTTAA TATTAATGAT AGATCCCACT
TACCTGAGTC TGA CTTACAA TGTGCCCTAGC ATTAAGTGTT TTACCTGCAT TCCCTTTGAC
G TTCAGAAC ACCCATTTTA CAGATAGGA AATTGGGTCA GAAAGTTCA GTAAC TTATC
CAAGGTCAAC ACAATTGGCA AGTGCCAGAG CTGAGCCAGG AACTGAGGTC CTTCTAACAC
CAAACAGCTT GTCTCCCCAA TCACTGTGCT ATTTTCCCTCC CCCAGAAGAT AATACTCTGA
TGGAAATGAA GGATAGTGTA ATAGGAGATT CGGTGTTCCCT TTTTTTAAAA AAAATTCAGC
TTGCATATTC CTAAGAGTC AATTCATGTT TAAAAAAAT TTCCCTTGTG CTTGCATGTG
ACATGTATTT TTAGGATCTG CTGTTAGCAA GTGTATTTTT GTGTGATTGA GTGGGAGAGT
GGGAAAAGTT TTGCAGAGCT GTTGAAGCCA GAATGCAGG GGGCTGCGCA GCAGAGACTG

NN

NN

FIG. 6A(65)



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NN

NN

TAAATCTCT GCCATCTCAG GTCTTGGAAC AAGCACAAAG AGATGTGTTT TCGATTATT
ATTCTATGTA CATCCCCAGA TGAATGACTA GTTAAAGGTA TTGTTAAAGC ATTTTAAATG
ACCCACTTCC AGCAGCGAAC AAAATCACTT GCTGTGCCAA GCCAACTGGC ATTCTGAGA
TGATAAAACC ACAAGTGAG GAAAACGTTA AACTGCTAA AGCAAAAATG ATACACAATA
ATGGAGAAGG AGAAAAATTG AGCTTTATTG TCTGCCTAGG CAGATGGCTG ACCACTAGGT
GGGCTCGGC GTCACGTCCA GGGTAATTGG TTGCTGGGGT GTTCTCTGGG AGGAAGATT
ACGCTTCAGC TCGGTCCACA AGATCCTGGC TCATTCTTTC CTAGATTCCA TTTCTGCCT
CCTCTCCATG ACTGGGTCTG ATGGTTGATC CAAACGGGCA ATTGAAATCA GAAGGTACC
TTTACCTTAA AATGCTTTTC TGGAAATAAA AGGACATGAA AAGTAACTAA GGACCGGATT
TCCTAGCCGT CTTCTCTCC TGCATGCGCA ATTTATCCCC AGATATAAA TTGCTGCTT
TGATAATTAT ACCCTCTAAA TGAGGGGCAA GTGGCTAATT ATGCCACAT GTGGCCGATT

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FIG. 6A(66)

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GCACTCCCCA TTAGCCCAATT ATGTGCTCAA TTATTGTGC ACATGAATAA TTGCACTCAT
 GGAAAATAGC GCCCTCCTTT CAAATCCTCG TGCTTGGAGT GGCTGATGGA GTAATTGTCA
 CACTGGAAAT GCACTTGGTG GGGAGGAAA GAGTATCAGA TACCAGGAAA CGCATAAGTG
 ACCAGAGCTC GCAGATGTTC ACTGCCACAA ATGGCCTTAG GAGCCAGAGA GAGCGGAAG
 GACCACAGGA TGGAACGGC CAGCCTGTGA GTTAGGAAGC CTGCTTCTGA AGTTGCCCTGG
 GCAGCTCATG TCGGGTGACC TTGGGCAAGT CATTAAGTTT CCTTCAGGTC TAACTGGTTC
 TGCATACACA ATGAGGATGG TAATAACGCC CAATTCCCAT CACTATCGTG GGATGGATCA
 GACTATTAA AAGATTAC AATCTGCTTG GGTAAGAAGCT TTACATAAAT ATGAGGCATT
 ATCATGTGCG TTGGTACATC TCCAATTATG AAGGAAGGT AATGACCCCTC CACAGCAATG
 CAGGACTCCT GGTGTGGAGG GAGGAAAGT TTGAGAAGGA CAGGAAGCTT GTTGCCCCAG
 CACTGATGTT TCTACTGAGG TACCAGAAA TGTCATGTGG TCATACAGAA TTCATTATT

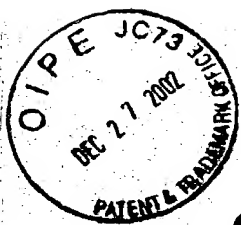
PP

PP

FIG. 6A(67)

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PP _____ PP
CATTCAACAA ACATCTGTCA ATTGTTACAC TGTCCCTGAGA AATTGGAAAA ATGATGAAAG
ACTCAGTCCT GCCTTAGGAG GTCACCTGGCA CATGCGCCG GCGCCCTGTT TTGGGCCCTTT
TACTCTGACC TGTGCTGATT TGCAAAATAGT GGGAAATTTT ATCTCAAGTC TATGAAATCT
GGCATGCATT TTCACGGTTT GATTGCCAGG TACATTGAT GGCAATGAGT CTTATAATGT
TTGGTTACCT TCATTTACCT AAGAACTGTG GTTGTGCTG TGGTTGTTGT TTTTGTGTTT
TTTGAGACGG AGTCTTGCTC TGTCATCCAG GCTGGAGTGC AGTGGCATGA TCTCCGGTCA
CTGCAAACTC CACCTCCCAG GTTCAAGCGA TTCTCATGCC TCAGCCCCCT CAGTAGCTGG
ATTACAGCG CGCACCAACA TGCCCGGCTA ATTTTGTAT TTTTGTGCG GGACACAGAT
TTCACATGTT GGCAGGCTG GTCTCGAACT CCTGATCTCT GGTGATCCGC CTGCCCTCGGC
CTCCCAAAGT GCTGTGATTA CAGCGGTGAG CCACTGTGCC CAGCCAGAAC TGTGTTTAA
ATGACAAATGC TAAAAGTGG TATATGTCAC AGTGTGCGGT GGGCTAAGA GGCACATTGC
QQ _____ QQ

FIG. 6A(68)

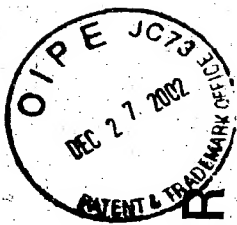


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QQ _____ QQ
TGCAGTGATC CATCATTCAT TTCCACCAT TCTCGCCTGG ATTAGCGCAG CAGCTCCCAG
AGAGGCACCT CACTTTGACC TTCTTCCTCA AAGACATTCT CTGTGACCTG CCTGGCCCTT
ATTACCTCTC TAGCTTTGCC ACTTCCCTAT GTCTCCATCT CCCCTCTCAC ACGTAGTAGA
AAGAGACTCT ACCTCATGGA GTAAGGAGAG GCTTCACAGA GGCAGGATTG CTATTAGTCT
TCAAAGATGA GGTATTTGCT AAATGAATGA GACAAAGGGA TTGGGGCCAC ATTACAGGGA
AATTGAGGTA TGTAATAGCC TGGTGCAGGT TAAGAGTG TG GACTCTGAAA CCAGACTCAG
CCTGGAATTG AATCCTGGCT GTGTGATGTT GGGCCAGTGA CTTAACCTCT CTGTGCTTTT
ATTCACCTTT CTATAAAATG GGGATTATAA TAAACCTACC TTATAAGGTT ATTATAACAG
TCAGTAAATA TAAAAATAGA AGTTTTTGA TGATGACTAT CACATCAGTA AACACTTGTT
TGCCATTATT TTTATTACTT GACTAAAAAT ATACCAAAA GACCATCCAA GAAAACCTT
TAAGCTGCTA GTGCAGAAAG ATTCCCCTTG TGTGTTGTG CTGGGGGTC AGTGTGCCT
RR _____ RR

FIG. 6A(69)



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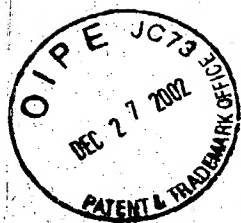
RR

GTGGCCCACT GGAGAGGAGA CAGCTATGGC TGGAGTGATT CTCAAACTTC AGAATGTCTA
AAATCATCAC ATGGACAAC TATTAAGGAA AGCAAATGCC TGGGCTCCAT CCTCAGAGAG
TCTCATTCAC TGGGTCAGGA TAGAGCCCAG GAATCTTTAC CTTAAAGAAC CATCCCACCT
CCCACCTCAT ATGATCCTTA TGCAGGTGAT CTGGGGCCCA CACTTTGAGA AATAGACTCA
GGTCAAAGTG GCTCTAACTG CATCTCATTT CTACCTGGC ATATCTAATA GTAGAGAAGA
AGACAATGCT AAGATTTTIG TTGGAGATCT TTTGCTGGGA TTGCTGCTTC ATTCATTAC
TCATTTATTT ATTTATTTAT TTATTTTGAA ACAGAGTCTC ACTTTGTCAC CCAGGCTGGA
GGCAGTGGC ACAATCTGAG CTCACTGCAG CCTCAGGCTC CTGGGTTCAA TCGATTCTCT
TGCCTCAGCC TCCCGAGTAG CTGGGATTAC AGTCATGCAC CACCACGCC AACTAATTCT
TGTAATTTTA GTAGTGACAG CGTTTCACCA TGTTAGCTAG ACTGGTCTCG AACTCCTGAC
ATCAGGTAAT CTGCCTGCCT CGGCCTCTCA AAATTAGTAG CTGCAATTAC ACGTGTGAGC

SS

SS

FIG. 6A(70)



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SS

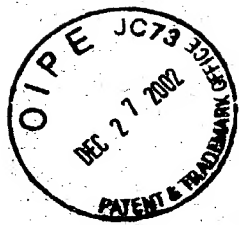
SS

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TCTGACTTGC TGCAACAGTC TGCTTTGAAG CAGGCTGTG TTTACACTGG TCAGATGTGG
AATTGTGGG CACACTTAGC AGCTTCCCTC TCTAATTTT CTGTATTTTC AGGAGAACAA
TTTTAAAAA TTTAATAAAA ATGCCTTAAA AATTAACATT ATTATAAGAT GAATCCCAT
TTTCTAATCT TGTAAATTAA AAACAATCAT AAGCATATGA GCACCTGCAC TTAGGGAATC
AAGGTTGGCA AAGCTAAACA CTTCCAGCTC TAGTGATTC GCGGCAATAC AAATGGAGCT
GGACTTTGGC CACAGTGCAA AAATATTGAT CTGTTGTTAG ATGCTCTGAA GTTTCAGAA
AGAATTGGTT CTGCCTGCTG TGCTTCAGTG CTTAAGGGAA GTGGTTCTC AAAATGTTAG
TTTTTAAGCC CAGCTTTCTT AAATAGGAAG ATTCTAATAG TAGCAAAAAT ATAACTGCT
TCTAGGTTA AAAAGGACCC AGCACACAAT GGTATCACA CACCTTTCTC CTCAGGTGAT
GAGTGGATGA GTGGCCTGGT GTATTTCATA ACATCTCCCA GTCCAAATG CTAAAGCAAT

TT

TT

FIG. 6A(71)



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TT
TGCTGAAAAG ATACCATGTG TACCGGAACC TTGCAGAGGT ATTTTGTGG CATAAAAAGA
AATATTGATC ATCTATAGTA AAAATGGTTC TACTTTAATA CTA CTGAGAA AAGATTTTCT
TTTCCCAGAT CTACATCCTG AATCTTCATG AAGACAAGAT CCCCTAACT TCCACTAACA
CCATAATGTG TGCTGTCCCTT TGTAATGTAG TCCACAGATC TCATAAACTG TCAGAAATAG
CAGAGATTGT AAGGTCATCC ACTTCCCCCTG TAAGCCCTGC GTCCCTCACT TACATCCCTA
ATAACGTCCCT CTAACCTCTG CTGGAGGCA GATTAGCTG CCAGCTGGGA AGAGCTCTGC
CCTAGTCAAC ATTTTATCT GTGGCTTCA GATGAGAACA CTGGATGCTT ATCTGAAAAA
AGCTCCTCAG GCTGGAGGA GGGATTGGCT CTAACAAGAT GCAATGTGAT AAGAATAAAA
GCGAAGCCAA ACTCTAGGCC CAAAGGCTCT AGCAACACAC TTTTGAGAAC CTGAGAGCG
AGTTTGGCT GATGCGAGCT TCTCCGCCCTG CTAAGTAGC CCATTCCATT TGGACGGCTC
TAGAGGCTGG CATGTTCTTC TCCACGTTGT GTTAATGTAC TCCAGTTTCT TCCTGCCATG
UU

FIG. 6A(72)

UU

UU

AACTGGCATG CCTGGGCTCC TCCTACCTTC CCCACTTTAA GTCTTCCCTC CCTCCTTCTG
ACCTTCCCAT TCCAGCCACA CTGGCCTTTT GTCTGGTCCT AACAAACCAT GCCTTTCCCTG
CCTCCAAGCC CTACACCTGC TATCCATCCC TCTGTCTGAG AGACACTCCC ACCCCTTCAC
AAAGCCTGTT TCTCATCCCTT CCAGTTCAGA TGTCTTCTCA GCTTGCCCTCA ACTGACCTCT
TTCAGCTATT CTCACCTTTT GTACTCTGTT CATTTCCCTC CTGGCAGTCA CCATAATTTA
TCTTTATTG AATCAATTTC TTAGTTGTAT TATTAGTTA TTGACACACT CTGTCTCTCT
GTGCCCTTCT TATTCACCTGC AGGCTTTCTT ATGTAAGTAA TTTATTTACT TAAATTTTA
AAAAATAATT CAACTTTTGG CCGGGCACAG TGGCTCACGC CTGTAATCCC AGCACTTTGG
GAGGCCGAGG TGGTAGATC AGCTGAGGTC AGGAGTTCGA GACCAGCCTG GCCAACATGG
TGAAATCCA TCTCTATTTA AAATACAAA ACTAGCCGGG CGTGGTGGTA TGCACCTGTA
ATCCAGCTA CTCGGGAGGT TGAGGGAGGA GAATCACTTG AACCGGGAG GTGGAGGTTG

W

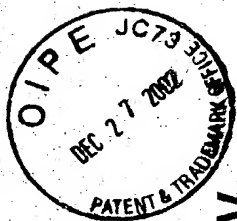
W

FIG. 6A(73)

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W

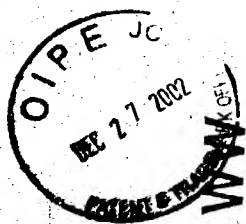
W

CAGTGAGCTG AGATCAGGCC ATTGCACTCC AGCCTGGGGC ACGAGAGTGA GACTTCATCT
CAAAAAACA AAAACAAAA AACCCCTGCT TTTCAGAGGG GCTGAACTAA TTACATTCT
CACCAATAGT GTATAAGCAT TCCCCCTTCT CTACAGCCTC ACTAGCATTT ACTTTTTAA
AAAACTTTT AATAATAGCC ATTCTGACTG GTATGAGATG GTATCTCCCTT GTGGTTTTCA
CTTGCAATTC TCTGATGATT AGTGATATTG AGCATTTGTT TATGTTTGTG GGCTGTTCTG
ATGTCTTCTT TTGAGAAGTG TCTTTTCATA TATTCTGCCC ATTTTTTGAA TGGAGTTGTT
TTGTGCTTGT TGAATTAAGT TCCTTATAGA TTCTAGATAT TAGACTTTTG TTGGATGCAT
AGTTTGTGAA TATTTTCTCC CATCCATATAG TTCTGTTTAC TCTGTTGATA GTTCTGTTT
TGTTATGTTT TGTTTTTTTG CTGTACAGAA GCTGTTTAAAT CTAATTGGTC CCACTTGTCA
ATTTTGTGTT TTGTTGCAAT GGCTTTTGAA TTTTAATAAT AAATTTCTTC CTAAGGCTGA
TGCCCGAAC AGCATTTTCT AGGTTTCTT CTAGGATTCT TATAGTTCAA AGTCTTATAT

WW

WW

FIG. 6A(74)



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WW

TTAAGCTTTT AATCCACCTC AAGTTAATT TTATATATAG TGAATGCAG GGTCCCTGTT
TCATTCTTTT GCATGTGGCC AGCCAGCAAT CCCAGAACCA TTTATTGAAT AAGGAATCTT
TTCCCTCATG CTTATTTTGT CAACTTTGTC AAAGATCGGA TGACTGTAGG AGTGTGGCTT
TTTCTGGGTT ATCTACTCTG TTACATTGGT CTATGTGTCT GTTTTGTAT CAGTATCATG
CTGTTTTTGT TACTATGGTC TCATAACATA GTTTAAAGTT GGATAATGTT ATGCCCTGTC
TTTGCTGTTT TTGCTTAAGA TTGCTTTGGC TATGAGGCT CTTTTTCAC TTCATATGAA
TTTTAGAATA GTTTTTTCTA ATTCTTTGAA AAATGACCCTT GGCAGTTTGA TAGGAATAGC
ATTGAATCTA TAGATTGCTT TGGGCAGTAT GCTATTTTAA TGATATTGAT TCTTCCCTATC
CATGAGCATG GAATATTTT CCATTGTGTT GTGTCATCTA CTATTTCCCT TAGCAATGTT
TTTTAGTTT CCTGTAGAG ATCCCTCCTAG GTATTTCAAT TTTTATGTGA CTATTTTAAA
TGGGATTGCA TTCTTTCATGT GGCTCTCAGC TTGAATGTTA TTGGTGTATA GAAATGCTAC

XX

XX

FIG. 6A(75)



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XX

AGAGTTTGT AACTGATTC TGTATCCTGA AACCTTACTG AAGTCATTTA TCAGTCTCTAG
GAGCCTTTGG CAAAGTCTGT AGTGTTTTCT AGGTATAGAA TCATATCATT AGCAAAAGAAA
GATAGTTTGA CTTCCTTCTTT TCCTATTGTA ATGCCTTTTA TTTCTTTCCC TTGTCTGATT
GCTCTTCCAG TACTACGTTG AATAGGAGTG CTGAGAGTGA GCATCCTTGT CTGTGTTCCAC
CTCTCAGGG AAATGGTTCC AGCTTTTGCC CATCAATAT GATGTTGGCC ATGGGTTTGT
CACAGATGCC TCTTATTATT TTGAGGTGTA TTCCCTTTGAT GCCTAGTTG TCAAAGGCCT
TTATCATGAA GGGATGTTGG ATTTTATTGA AAGCTTTTC TGGGTCTTAT TTGGTGAATT
GCATTTATTG AATTGTGCAT GTTGAGCCAA ACTTCCATCC CAGGGATTAA ACCTACTTAA
TCATGGTGTT AACTTTTGA TGTGCTGCTG GATTGGGTTT GCTAATTTT TTTTTTTTTT
TAAGATGGAG TCTCGCTCTG TCGCGCAGGC TGGAGTGCAG TGGGTGATC TTGGCTCACT
GCAAGCTCCA CCTCCCGAGT TCATGCCATT CTCCTGCCCTC AGCCTCCCGA GTAGCTGGGA

YY

FIG. 6A(76)



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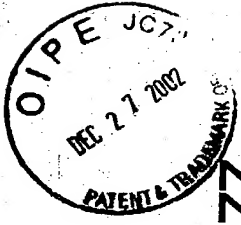
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YY

CTACAGGCAC CCGCTACCAT ACCCAGCTAA TTTTGTATT TTTTAGTAGA GACAGGATTT
CACCATGTTA GCCAGGATGG TCTTGATCTC CTGACCTCGT GATCTGCCCTG CCTCAGCCTC
CCAAAGTGGC TAGTATTTTT TTAATTACTA TTTTCTCA CCCTTGCTGC CATCTTATGA
TTTTCTAGTA TTTTGTGAA GATTTTGCA TCTATTTTCA TCAGGGATAT TGGCCTGTAA
TTTTCTTTTT TCATTTTCATC TTTACCACAT TTTTGTATCA GGTCATACT GGCTTCATAG
AATGAGTTCA GGAATGGTCC CTCCTCCTCG AATTTCTCT GTAGAATTAG TACCAGCTCT
TTGTGTGTCT GGGAGAAGTT GTATGCCAAT AATTAAATG CAGTTAATAT TTACTGGACA
ATTTCCTCCA GATAATTGTA TATGATTTTT GTCCACCCCT GAGTTGATAC ATGTATTTTA
ATTGTATCAT GGTATGAAA GAGCAAGAGT TATTGGTCA CCTAGTCTTG CCTATAGATG
TTGCCTAATG ATTCAAAGTA GATATTTTGG GAGCCTTAAC AGGTGCCGTG GACTAGGCAG
TTTTGTTTTT TTTTTTTTTT GAGGACAGA GTCTCGTTAT GCTGCCAGG GCTGGAGTGC

ZZ

FIG. 6A(77)



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ZZ

ZZ

AGGGGCATGA TGTAGGATCA ATGCAACATC CGCCTCGTGG GTTCAGAGCA ATTATACTGC
ATCAGCCTCC CCAGTAGCTG GGACTACAGG CTCACGCCAC CACGCCTGGC TAATTTTGT
ATTTTtagTA GAGATGGGGT TTCACCATAT TGGCCAGGCT GGTGTTGAAC TCGTGGCCTC
ATGATCCACC CGCCTCGGCT CCCAATGTGC TGGCTTACA GGCGTGAGCC ACCGCACCCG
GAGATTAGGC AATTTTATAT TCCCAAATAT CCAACTCTTC TGACCCGCTT TCTCAGCCTG
GGTGATCAG GCACAAGGCC TGTTCAGATT ATGTGGTCTC TGAAGATATG GCTCTCCAGG
GTTGACAAATG TGGATAAGGA TTCACCTGGT TTAGGATTTA CACATTGCGC TTGAATGTCT
GTTGCACCAA GTAGACAGTC CATCCCAACT TGGCCATTG GTCAGAGCTG TAAGGAGACA
AGGAGGTGG CAGCCGCTGC TGTGAACTGC TTGGACAAAG ACTGCCAAAT AGCTATCAGA
CAGTGTTAAC AACAGCTGAT TTAGGTTGA AGGGGGCAGT CTCTTGGGC ACTTACTATG
CTGCATCATC CTCTTTGGAA AATGCTCTTC AGGTAAC TGC CTAACAGACT GAGAAAATAA

AA'

AA'

FIG. 6A(78)



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00000000.00000000

AA' AA'

AATGCTCACA GAGAAAAAG ACCCGGAAAG TCTGACTTCT CAGAGCTCAG TGTTAGGTG
CAGAACTGGA TTGTGAAAGG ATTTTAAAT TTTTATATT CATTCAGGG AACATTCAAT
TATTCCATCC TTCTCCACTC CCACCTGTCT GTCGTTGTCT TTGTCTCTGT CTCCCCACCT
CTCTCTCTAG ACACACACAC GCACACACAC ACACACACAC ACACACACAC ACACACACAC
ACACACACAC ACACACACAC ACACACACAC CCTATTTCAT TGCCAACAGT AATAGAGTTG
CTTCTTTACT TCTTGGAGAG AAAAGCCTCA ATCTGAGGAA GCTGTGCTGA CTAGCCTTGC
TCTTAATCAT GGAGACAATG CTTTATGCCT TTATCTTTGC ACAGCTGAAA GCCATGGCAG
AAGCAGTCCT CTAACGAAA TAAAATAGAA AGGTTCTCTGC TAAGCCCTGG CAAATGCAGC
CTTCTATCCC TCCCCCAACA CTCACAGCTT CTGAGCAAGA TGTGTCTGCC TTCCAGGAGC
TGGGTGATGG GCAATAATGA GCAGAGCCAC GTGAAGGAAA GATGGGTGAA GAAATGTGTG
TGGAGTCATG CTGGCTGCAC TGACCATGAA ACAAGGATC TACCCCTCTA GTAACTGCCC

BB' BB'

FIG. 6A(79)



BB' _____ BB

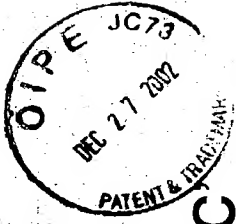
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AGGTATTAGA GGAATTCGT AAGATTGAGC CATTATTCC TGCACAGATA CATAATAATG
GACACGGGCC ATGGTGGCCA GCATTCTTGC TCTTGACAAT GGTGAAGGA AGGGTTGTAG
GTCATGGCTA TGCTCTCAGA ATTATAATGG AAAGAAACAG CTCCTGAGTG TTACTATGA
GCCAAGGGCT GTGCTAAACA CTTTACCATA TGATGACATC TTTTCTCAC AGGTATCAAA
AAACAATAGG ACATACCGGA TAGCTACAAT CTTGGGGCC CTGCAACAC AATAATGTGT
ATTCTCTTCT TCAAATCCTA CATATTGCTA CAAACTGTAT CCTGAGGCA TATCATTTGT
AAAATAAAA CATATAAAGT ACTACTTTTG TTTTGTGAGA TGGAGTCTCG CTCTGTCACC
CAGACTGGAG TGCAATAGCA TGATCGTGGC TCACTGCAAC CCCCTGCTCC TGGGCTCAAG
TGATTCTCCT GACTCAGCCT CTCAAGTAGC TGGATTACA GCGCACGCC CCCATGCCCTG
GCTAATTTT GTACTTTTAA TAGAGACCAG GTTTCACCAT GTTGGCCAGG CTGGTCTCAA

CC' _____ CC'

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FIG. 6A(80)

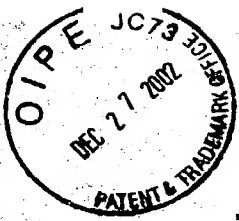


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CC' _____ CC
ACTCCTGACC TCAAGTGATC CACCTGCCTC GGCCTTCCAA AGTGCTGGCA TTACAGCTGT
GAGCCACTGC ACCCGGCCCA TATAAAGTAC TACTAATGTA ACAGGGTGCT AGTCCAGACA
GTGACCACAC GTGGTGTTCA TTGAAGGCTG GACTAACAC TCCAGCCTCT CCGCCATCAC
AGAGTGATGA CTGCCCTTCCC TGAAGCAAAG CTTCCTGGTC AAGGAAAGGC CAGTAAGTGA
CTGCTCTTTG TTGTATACAT GTTAGATGAT CAGGCCTCAA GAAAAGTATA AAGAGATCTT
TGTGCTCTCT GGGACTCAA AAGCTGCACT CTTTGGGGA AGGATAGCCA GTAAAAGTG
GCCCAGGTAA AGAGGGCCTG GTACACCTGG TTCTGCAAGA TGGTAGACAC AAAAATGAGA
GCTACATTG GAGCTTATGT GCCCCTAACT CTGTACATAA CCTGCAAGAT CTAATTACTA
ACAACTGGAA TCTTGGAAC ACCTGTAGTA CATCCTTGGC TAAGGTTAGC CCCAACAGAG
AGGGCTCTCC TCTTACAGAG AACCATTACA TTTGTGCCTT CATCCTAGAG TAGAAAAGGC
ATGATCAGAC TACTAAAAG ACATCAGGAA AGGCCTGTG ACATCTGAGG GAAGTGTTG
DD' _____ DD'

FIG. 6A(81)



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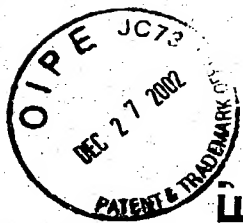
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DD' _____ DD'

CCCTCTCTGG GATGTTGGTT CGGGAAGAGG GGCATGGAGG AGTGCCTGCT TTAGATGGTC
ATTCAGGAAC CCAGGCTGAT AGTGAGAGGT GAAGCCAGTT GGGCTTCTGG GCTAGGGGGG
ACTTGGAGAA CTTTGTGTCT TAGCTAAAGG ATTGTAAATG CACCAATCAG CACTCTGTAA
AATGGACCAA TCAGCAGGAT GTGGGCAGGG CCAATAAAGG GAATAAAAGC TGGCCACCAG
AGCCAGCAGT GGCAAACTGC TCAGGTCCCC TTCCACGCTG TGGAAGCTTT GTTCTTTTGC
TCTTCACAAT AAATCTTGCT GCTGCTCACT CTTTGGGTCT GCACTATCTT TATGAGCTGT
AACACTCACC GTGAGGGTCT GTGGCTTCAT TCCTGAAGTC AGTGAGACCA CAAACCCACT
GGGAGGAACA AACAACTCTG GACACGCCAA CTTTAAGAGC TGTAACATTC ACTGCCAAGG
TCTGCGGCTT CACCTCTGAA GTCAGCGAGA CTATGAACCC ACTGGAAGGA AGAAACTCCA
GACACATCTG AACATCTGAA GGAAGAAACT CCAGACACAC CATCTTTAAG AGCTGTAAACA
CTCACTGCAA GGTCTGCGG CTTCACTCTT GAAGTCAGCA AGACCAAGAA CCCACTGGAA

EE' _____ EE'

FIG. 6A(82)

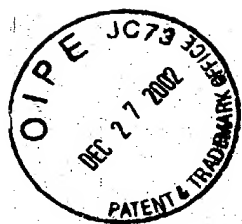


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EE' _____ EE'
GGAAACAATT CCGGACACAT TTGTGGTGACC CAGATGGGAC TATCACCAAG TGGTGAGTAC
CATCAACCCC TTTCACCTGT TATTCTGTCC TATTTTTCCT TAGAATTCGG GGGCTAAATA
TTGGGCACCT GTCAGCCAGT TAAAAGCGAC TAGCATGGCT GCCAGACTTA AGAAACTAAA
GACACGGGTG TCAGACTTTC TGGGAAAGGG CTCTCTAATA ACCCCCAACT CTTTGGAGTT
GGGAGCGTTG GTTTGCCCTGG AACCAGCTTC CACATTTCCCT GTACTTCTGG GCTGAGACGA
GGGTCAACAT AGAGGAAAGC CATTCACTC TGGGGTCCCG ACAGCAAGTT GGTGACCCCT
GTGGCCATGA TCACAACTCT CGAAGTCATG TTGCCCAAGC GAGACTCACC CATCTATCCT
ATCTATCCTG ACTCTTGCTT CCTGGGTCCT AATGCCCTGGA AGACAAAACCT TCCTCTTGTC
TCTGTTCTCC AAGGCTAGTC CCACTTCTAA AAACCACTCC CTGTCTCTGG TGCCTTTCTA
GTTTCTCCTA TAAGAATGAT TTCTAGTATA AACTCCAGGA CTCTATTCTC TTCTTTAGGC
ACCCGGGCTC ACCAATCAGA AAGCCATAAT TTTTGCCCAA AGCCCATCT TAGGGGGAC
FF' _____ FF'

FIG. 6A(83)



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FF'

TATCTGGAAT TTTAGGATCC CTCCTCAGAC AAGCAGGCCT AACAAAAGCT ATTCCTGAAG

CTAGGATATG GGGAGCCTCA GAAATGATAT CCTTCCTATT CAAGTGAGGA CAAAAGGCAT

CACTCTTCCA ATTCTGGAGA TCCCTTCCCT CCCTCAGGGT ATGGCCCTCC ACTTCACCTT

TGGGGCATAA CGTCTTTATA GGACACGGGT AAAGTCCCAA TACTAACAGG AGAATGTTTA

GGACTCTAAC AGGTTTTCAG GAATGTGTCG GTAAGGGCCA CTAAATCCGA TTTTCTCTCG

TCCTCTTTGT GGTCTAGGAG GACAGGTAAG GGTGCAGGTT TTCAATAATG TGTTGGTAAG

GGCCACTAAA TCTGACATTC CTTGGTCCCTC CTTGTGGTCT AGGAGGAAAA CTAGTGTTTC

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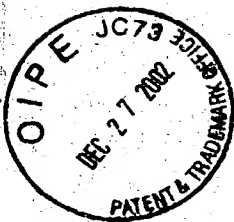
TCTTGCGCAA GAGGTGTTT TCCTGCTGCA TTGGTGGGCT CAACTATTCC AATCAGCAGG

GTCCAGTGAC CTTTGCGGGT TCTTGGGTCG GGGGTGGGG GGAACAAACA GACCAAACT

GGGGCAGTT TTGTCTTTCA GATGGAAAC ACTCAGGCAC CAACAGGCTC ACCCTTGAAA

GG'

FIG. 6A(84)



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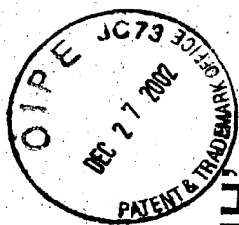
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GG' _____ GG'

TGATATCCCTAA GCCATTGGGA CTAATTGAC CCGCAAACCC TGAAAAAGAG TGGCTCATTT
TATTCTGCAC TATGGCCCTGG TCCCAATATT CTCTCTCTGA TGGGGAAAAA TGGCCACCTG
AAGGAAGTAT AAATTACAAT ACTATCCTGC AGCTTGACCT TTTCTGTAAG AAGGAAAGCA
AATGGAGTGA AATACCTTAT GTCCAAACTT TCTTTTCATT AAAGGAAAAAT CCACAACTAT
GCAAAACTTA CAATTCACAT CCCACAAGAA GAACTCTCAC TTACCCCCCAT ATCCTAGCTT
CCCTATAGCT CCCCTTCCCTA TTAATGATAA GCCTCCTCTA TCTCCCCACC CAGAAGGAAA
CAAGCAAAGA AATCTCCAAA GGACCACAAA AACCCCTGGG CTATCGGTTA TGTCCCCCTC
AAGCTGTAGC GGGGAGGGG AATTGGCCC AACCCAGGTA CATGTCCCCT TCTCCCCCTC
TGATTAAAG CAGATCAAGG CAGACCAGGG GAAGCTTTCA GATGATCCTG ATAGTATAC
AGATGTCCTA CAGGCTAG GGCAAACCTT CAATCTCACT TGGAGAGATG TCATGCTATT
GTTAGATCAA ACCCTGGCCT TTAATTAAA GAATGTGGCT TTAGCCACAG CCCGAGAGTT

HH' _____ HH'

FIG. 6A(85)



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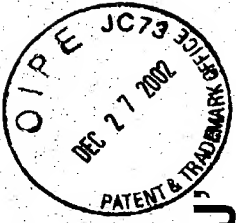
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HH' _____ HH'
TGGAGATACC TGGTATCTTA GTCAAGTAAA TGATAGAATG ACAGCTGGGG AAAGGGACAA
AGTCTCTCCC GGTGAGCAAG CCATCCCTAG TGTGGATCCC CACTGGGACC TAGACTCAGA
TCATTGGGAC TGGAGTCGCA AACATCTGTT GACCTGTGTT CTAGAAAGAC TAAGGAGAAAT
TAGGAAAGAG CCTATGAATT ATTCAATGAT GTCCACCATA ACTCAGGAAA AGGAAGAAAG
TCTTGCCCTTC CTTGAGTGGC TACAGGAGCC TTAAGAAAAT ACACTCCCCCT GTCACCCCAAC
TCACTCAAGG GTTAATTGAT TCTAAAAGAT ATGTTTATTA CTCAATCAGC TGCAGATATC
AGGAGAAAGC TCCCAAAGC AAGCCCTTGG CCTGAACAA AATTGGAGG CATTATTAAA
CCTGGCAACC TTGGTGTCT ATAATAGGG CCAAGAGGAG CAGGCCAAA TGGAAAAGCG
AGATAAGAGA AAGCCACAG CCTTAGTCAT GGCCCTCAGA CAAACAAACC TTGGTGGTTC
AGAGAGGACA GAAATGGAG CAGCCAATC ACCCAGTAGG GCTTGTGTC AGTGTGTTT
GCAAGGACAG TTAAAAAAG ATTGTCCCTAT GAGAAACAAG CTGCCCCCTC ACCCATGTCC
II' _____ II'

FIG. 6A(86)

II' _____ II'
ACTATCGCTG AAGCAATCAC TGAAGCCAC ACTGCCCAA AGGACAAAAG TTATCTGGGC
CAGAAGCCCC CAAGCAGATG ATCCAACCAC AGGACTGAGG TGCTCAGGGT TAGCGCCAGC
TCATGTCATC ACCTCACTGA GCCCTGGGTA CATTTAACCA TTGAGGGCCA GGAATTGAC
TTCTACTGGA CACTGGTGG GCTTTCTCAG TGTAACTC CTGTCTGGA CAGCTGTCCT
CAAGGTCTGT TACCATCCGA GGAATCCTGG GACAGCCTAT ATCCAGGTAT TTCTCCACC
TCCTCAGTTG TAACTGGGAG ACTTTGCTAC AGATAGTAAG TATGCTTACC TAATCCTACA
TGCCCATGCT GCGATATGA AAGAAAGGA ATTCCTAAT TCTGGGTGAA CCCCATTAA
ATATCACAAG GAAACTATGG AGTTATTGCA CACAGTGCAA AAACCAAGG AGTGCGCGGT
CTTACATTGC CGAAGCCATC AAAAGGGAA GGAGAGGGA GAACTGCAGC ATAAGTGGCT
GGCAGAGGCA GGAAAGACA AGCAGAAAGG AAAGAGAGAA AGAGCAGAAA GTGAGAGAGA
AAGAGAGATA GGAAGTGATA GCAAAGAGGG AGTCAGAAAG AAAAGAGAGA GGAGAGAGAG
JJ' _____ JJ'

FIG. 6A(87)

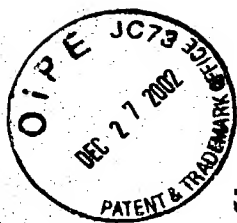


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JJ' _____ JJ'
AGGGGAAAG ACAGAGAGAG ACAGAGGAAG AGACAGAGAG ACAGAAAGAG AGAAGCAAAG
AGAGGAAGAG ACAAGAAGG AGTCAAAGAG AGGGAAGAG AAGTAGTAA GAAAAACAG
TGTACCCAT TCCCTTAAAA GCCAGGTAA ATTTAAACC TATAATTGAT AATTGAAGG
CTTTCTGTT AACCTATAA TACTCCCAAT ACCACCTGT TGTTCAGTGT TAAACAAGG
TTATTAGCC AAAAGCCACT GAGGCCACTG ACAACCCGTA GCCTTCTTAT CCAAAATCCT
TAACACAGCA GGTTCCTTAA CAGGGATCTA ATCTTAGTC GACCAGACTG GAGAACTGCC
TTCAGGACAG GATGATAGAT GGTTCCTCCC AGGTGATTAA GGAAAAAGAC ACAATGGGTA
TTCAGTAAGT GATAAGGAAA CTCTTATAGA AGCAGAGTTA GGAAATGTC GAAATAAGTG
GTCTGCTCA ACGTTGAAGC TGTTTGCTGT TTGCACTCAG CTAAACCCTTA AAGTACTTAC
AGAATCAGGA AGGAGCCATC TATACCAATT CTAAGTTAAT ATGCACTGAA CGAGGTTTAA
TTAATAGCA AGAAAAATTAA AATCTCAAAC TTACGAGGTT TTCAAGTAA GTAAAGTTTG
KK' _____ KK'

FIG. 6A(88)

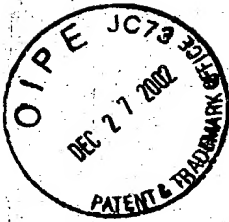


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KK' _____ KK'
GTAAAAGTTA ACAGCGTAAC ATGTATTATC CTAGTACCAC ACATTCTCTC AAAGGATTG
CTCAGACAGT TTGCAAAAAA GAACGAAATC TGTCTTACT CTACAATCCC AAATAGACTT
TTGGCAGCAG TGA CTCTCCA AAACCGCTGA GGCCTAGACT CTCATGTGA GAAAGGAAGA
TTC TGCACTT CTAGGGTA GAGTGTGTT TTTATACTAA CCAGTCAGG ATAGTATGAG
ATACCACCA GTGTTTACAG GAAAAGGCTT CTGAAATCAG ACAATGCCTT TCAAACTCTT
ATACCAACCT CTGGAGTTGG GCGACATGGC TTCTCCCCCTT TCTAGTCTT GTGACAGCCA
TCTTGCTAAT AGTCGCATT GGGCCCTGTA TTTTAACTT CTTGGTCAA TTTGTTTCTT
CTAGGATCGA GGCAATCAAG CTACAGATGA TCTTACAAAT GTAACCCCAA ATGAGCTCAA
CTAACAACTT CTGCTGAGGA CCCCTGGACC GACCCGCTGG CCTTTCAAT GGCCTAAAGA
GCTCCCCCTT GGAGGACACT ACCACTGCAG GGCCCTTCT TCACCCCTAT CCAGCAGGAA
GTAGCTACAG CGGTCATCGC CAAATCCCAA CAGCAGCTGG GGTGTCCTGT TTGAGGGGG
LL' _____ LL'

FIG. 6A(89)



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LL' _____ LL'

GATTGAGAG TGAAGCCAGC TGGGCTTCTG GGTGAGGTGG GGAAGTGGAG AACTTTTGTG
TCTAGCTAAA GGATTGTAAA TGCACCAATC AGCACTCTGT GTCTAGCTAA AGGATTGTAA
ATGCACCAAT CAGCACTCTG TAAAATGGAC CAATCAGCAG GATGTGGGCG GGTCAAATA
AGGGAGTAA AACTGGCCAC CCGAGCCAGC AGTGGAACC CACTCGGTC CCCTTCCACA
CTGTGGAAGC TTTGTTCTTT TGCTCTTCAC AATAAATCTT GCTGCTGCTC ATTCTTTGTG
TCCACACTAC CTTTATGAGC TGTAACACTC ACTGCGAGG TCTGTGGCTT CATTCCTGAA
GTCAACAGAC CACGAACCA CTGGAAGGAA CAAAGAACTC CCGATGTGCT GCCTTTAAGA
GCTGTAAAC TCACTGCGAA GCTCTGCAGC TTCACTCCTG AAGTCAGTGA GACCACAAAC
CCACCAGAAG GAAGAAACTC TGGACACACC TGAATATCTG AAGGAACAAA CTCCAGACAC
ACCATCTTC AGAGCTGTAA CACTCACCGC AAGGTCTGT GGCTTCATTC TTGAAGTCAG
CAAGACCAAG AACCCACCGG AAGGAACAAA TTCCAGACAC AGTAGGAAT CTGTATTTT

MM' _____ MM'

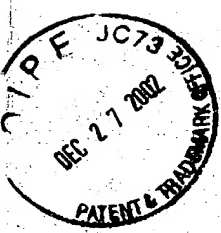
FIG. 6A(90)

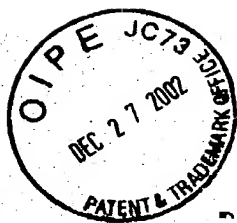
MM' _____ MM'

GATCTGTGGC TTCCAGGGTT ACTCCAGTCA TTGAAGTCTC CATTGCAGCC TTAAGGAAAC
AGAGAATGGT TTGGAGGAGC ACATGTGGGA ATTGTTATGG ACCAGGCTTG AGATGCACAT
AGGGCATTTC TGATCAAACC TAGCTGGAAG CAGGGCCAGG AAATATAATC TAAGGAAGAC
AGTTTTTGTG GACAGTAGTA GTCTTTGTCAT CTGAGACATG TAGATTATCA AGCAATTAAAT
TAGAAAAAAT ATAGCCAGGT GCGATGGCTC ATGCTGTAA TCCCAGCACT TTGGGAGGCC
AAGGGGTGTG GATCACGAGG TCAGGCGTTC GAGACCAGCC TGGCCAAACAT GGTGAAACCC
CGTCTCTACT AAAAAATACAA AAATTAGCCT GGTGTGGTGG CACGCATCTG TAATCCCAGT
ACTCAGGAGG CTGAGGCAGG GGAATCTCTT GAACTTGGGA GGCAGAGGTT GCAGTGAGCC
AAGATCACAC CACAGCACTC CATCCTGGGT GACAGAGCGA GACTCTGTCT CAAAAAATAA
AAAAAATAAA GAAAGGAAA ATATAATCAA GAATATTGAC AGGTAACATT TATTCAACAC
TTACTATGCA CCAGGCAATA CACTAAGTGT TTTACATGGA TTAATCATT TAATCTTAAC

NN' _____ NN'

FIG. 6A(91)





NN' _____ NN'

AATAGCCCTA TGAAGTCAGT GCTGTTATTA TCTCCACTTT ATAGATAAGG AACTGAAGT
ACAGAAAGGT CAAGTAGAGA AATGGCCATG CTTCATTTCT CAGTTTTTGA AGCAACTGTT
ACAGGAATCT GGTGTGAGAA ATGCTCTAAC AAGATGTGAG TCAGGGGTTG GGAGTACTG
AGTCTGAGTT GGCAGTTGG GGATGGAAG ATGGATGAAG AACAGCTTGA CAGAGAAGCT
GACACTTGGC AACTCTGTGG GACCTTGAAG GGTAGAGGG ACTTCACCAA AGAAACTGGT
GGTCAGGGAT ACGGAGGGT CACGGCAAGG AGGAAAGGA AACTGTACCA CAGCAGAGAG
TCTGAAGCTA CTACAGTGTA GTTCAGCGTA TAAAGAATAA TTATTTTAAG GTAAACTTAT
AACCTCATGC AAATATAAAA TGAACACGTG TCAAAGATCT TATTTAATTT ATTAATTAAT
GAGGGAACCT GTAAGATGTT ACAGCCAGTT CAAAGGATAA TTCAAATAAA TCCATGCACA
TATGTAGGCA ATAAGGAATG CTGAAATGAA TTAAAAAGTA GATGTAAACT GATTATCCA
CAGAGAAATA ATCAGTTGCA TTTCACATAA CAAATTCAG TTGCTTTTCT ACAGAAGGAA
OO' _____ OO'

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FIG. 6A(92)

00' _____ 00'

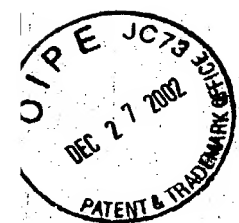
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ATGAAAGGCA GATATAACCC ACAATGGTAT GATAGATACA ATATCCACAT CCAGGATGTT
TTTTTCTCAT TTCAAAGTCT TTCACAAAGTT TTCCTGATAA GGGAGTGTC ATAATACTGT
ATGGCAGGCA ATAAGACTGG ATGGATGGTT GGGGCCAGGT TTTAAGGGGT AATAAATGCC
ATGTAAGGT ATGTGCATAC TGTGCAACAT GTCGGGGAAT CTCAAATTAT TGGTAGAGTA
TGTAAGAAAC ACTTGTGGAG CTTGTTAATA AATCAAAAT CCCAGACCCA ACTCCTCAAG
GGTCTAATAC AGTAGGTTTG GAGTAAAGCC TGAAAATCTG CAATTGTGCA AAAAAAATAA
CCCAGGTGAT TCTGATACAC TTTGAGAAGC ACTGGTGGAA CTAATAGTCA CTGAACGTTT
TTGAGCAGGG GAGAAACCTG AGGACGTCTA TGTTGCAGCA GTGGAAACTT GATTAGAAGT
AGGAGAAGAT GCATGGTCTT AAAAGAATGC AAAATGATGG CTAATATTG AGTGCTTATG
ATGGGCCAGG GGCTGTGCTA GCGCGGTGGC ACACATTCAA TACGATGGAA GCCTGTACCA

PP' _____ PP'

FIG. 6A(93)

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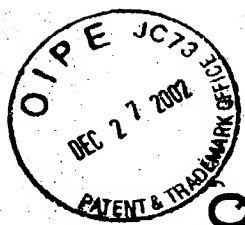


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PP' _____ PP'
GTCAGTATTA GTGGGGTATC TTTAAGAGTG ACCAGAATTA AGGGGGGTTT TCACCAAAGC
CTGAGGACTG AGCCTCCTCA TCCTAAATTC AGACACAATG CTGTACCTAT GCATTTCCT
CCAGGCTGTT CCTGGGCCCTC CAGGACTGG CCCAGGCTCC TGATAAATAG GGACTCCCAA
CAACATAAG CCTGGATTTT GGAAGTTTCT GAATGTTACT CAGGCTTTCT AGTAACTGTG
GAGATCTGAA TAATAACACA ATTCTAAGTT CCCCTACTCA TAAAGCTGCT CATCATTTAG
ATGGGGTAAA GCACCTGAAA TACAATGAGC ATCACTATTT TCATTTCATCC ATGAAATGAA
CATTCCGGGG AGATCAGTAA GTTGATGTAT CACCCTTGAA CAGGGCAAAA TGAATACTCA
CCAGGAATAT GTGGTATTTT AAAAAGAAGG CAAAGGAAG AATAGTGGG ATGGGGCAA
AACTTTAAAT AGATTCCCC AATCATATAT GGCAATTGAA GATAATTAA TTATCATTTT
AATTGAGTAA GTACTCATAG AGCCCTCACT ATTTGAAAAT GAACTGCCCTC CTAATTGTTA
TTGTGCAAAT GTGATACATT AAACCTAAGC TATTTTAATA AAACATCCAT TTTCGGAAGC
QQ' _____ QQ'

FIG. 6A(94)



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QQ' _____ QQ

TG TAGTAGGT TC TCC CAGGT CAGATTGAT AAGCCATAAA GAACAAATGC CAACTCCTAT
TTTTCTATGG TGCTGGGAAA TAAGAGAGAA ATGTGTAATT CAAAGCAATC ATTTAATTTT
ATCCAATAGC TTGATTCTCC TCTCTCTTCT AGCCTTTTAG CTAAGCTGTT ACCAAGTAAC
CACACTAGTT GGCTTGAGTC TTACCACTGT TTCCCTGACC CCACAGTGGA GAGACTGCAT
CTGTTAAAGA GCAGTTATGT AACCATGGCT ATGCTGAGCT GGGATTCCCA AGGCTTAGGT
TCTTTCTGTG AATGACCTTC ACCAAGACAC CTGAGGTCTG TGTGGAACCA CAGGCTTGTC
ATCTCTAAGG CAGAGTTGAT AATTCATCT GTTCTTGAG CCCACACTGA GAAAAAGATT
ACATGACTGC AGTTATTGA ATGCCTCATG GAAAGACGTC TTATAAATAT TATAATTAAT
GTTATCATTA AGTAATGCTT CAATGCAGAT CTTCCAAGTA TAAATATCAG CTGAGTAAGA
AGTCAATCTT CCCTGAAGCA AAATTGAAAT TTGTAAATGC GATTCTGGG AGCTTATTTT
GTAATACATG ATTCAGAGT GTCCATAACA CACACAATTG TCTTTTTC CCTACATGGG

RR' _____ RR'

FIG. 6A(95)



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RR' _____ RR'
CTATTACAA CAAATTTGGA CTTATAATGT TTATTCCAG GGATGACTAG AACTTTAATA
ACAAACCTTG GCCAGGCAT AGTGGCTCAT GCTATAATC ACAGCACTTC GGGAGGCTGA
GGCTGGTTAG ATTACTTGAG GCCAGGAGTT TGAGAACAGC CTGGCCAACA TGGCAAAACC
CTGTCTCTAC TAAAAATACA AAAATTAGCC GGTGTGTGTG GCGCATGCCA GTAATCCCAG
TTACTAGGTA GGCTGAGGTA CGACAATCGC TGAACCTGG GAGCGGAGG TTGCAGTGAG
CTGAGATTGC ACTACTGCAC TCCAGCCTGG GTGACAGAGA AAGACTCTGT CTCAAAAAAA
AAAAAAAAT AATAATAATA ATAATAAACC CTGATGAAAG GTTCTAAAA TGTTCATC
TAATGGTTTT CTTGACAATT AAATTTCTA TATAATGTCA GTTCATAAAA AACTGAGAA
CGACCACATG TCATATCGAC TGCTTAAAG AAAATACGTA TATTACAAA CATATACACA
ATACTGTCTT TTGTCTGGTT AGTTAGAGG TTAGATAAAC TGCAGTATGT TGTAGTGCAC
AGATCATAGA ACTAGGAGTC AGGATGTCTG GATTCCTAGG AAGCAATGAA TAGGTTGCAC
SS' _____ SS'

FIG. 6A(96)

SS'

SS'

GGTGCAGCTC AAGGTATTTC AAAGTGTGGT GCCCAGACCA GCATCATGAG TATCCTCAGG
GAGCTTGTTA GAACTGCAGA TCCTTTAACT CATTGAATCA GAATCCCTAG GTGTGGGGCC
CTGAAATCTG TATTTTAGCA GGCCTCTCTGG GATTGTGATG TGCCTTAGAG TTTGACAACC
ACTGGGTAGC TGATCCCTGAC TTAGACTTAT CAGGCATGTG ATCTTGAACA AGTCACATAA
TCTCACTGAG TTCAGTTTTTTC TTATGTTTAA AATAGGCCCA ATAATATCTA TTTCACATGG
ATTGCTTTGA GGATTAGGCA AGAGATCTGT AACAGACACT GTAGAACAGT GTCTCTGGTC
TACAGCTGAC CTTCCATAAA TGGTAGTTGC CTTGATTCTC TGCTCTGCCA CATAATAGCT
GGTTAACTAT GAGCAAGTAA TTTAGTTCTT CTCAGTTTAG TTTCTTCCCC TGTAAGAAGAA
GGAATAAAC TGTATACTC CATTCTGAA TTGCTATAAA AGTCATTAA TTATGGGCAT
TGAAGCTCTT TGTTCACTGT ATAAGGACTG TACATCTAAG GGATTAATGA GACCAGGCTT
ATGATTTTAA GCATGGAGTA AATAGTAACA CTGACTCTGT TCTATGAACC ACATGGAAAC

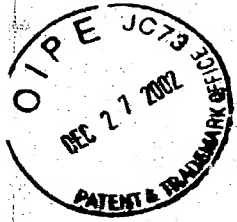
TT'

TT'

FIG. 6A(97)

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TT' TT'
TCTAAGAAT ATGCACATTT GAAACACAGG TATCATCTGG GGAAGGTGAT CTGCTCACCC
AAACCAGTTC ATGAACATCA ATCTCCAGTG GCGTGCTGGA GCTAGCTGTA CCAGCTCATG
AGGGCCAATT GTTTCATTTT TAGGAATTTT GTTTGCTGGT TAAAAAATAGT CATATTATTAA
AATTAAATTA TGTAACAAT AATATTAGAT AAAATAAGTT AAAATAAAAA CAAAGGAACT
AATTATCCCC AAACCTCTCC CCACCTAATT ATTTACTAT CTGTGCCCTTG GGATTATTTA
CATTGATTTT ATCCATATGG TGACAATACT ATTCATATAT AAATGGTGTG CTTCCTTTCA
TAACTCTACA TAGCCTGATG TCAGGCTAGT AGCTTGAAAT TGGCCACAGT GGGAGTGTGA
GCATTGTAC CATGAGGCTT GGCCAAGGCT ACAAAATCCAG ACTTTTGT TTCCCTCCTG
GAGAGCTGTC TGTAAAAAT TTACCAACAC ACCACTGGTC TTACCTTTGT TAATTACCA
CAGTCCAGGT TCTGACCCTAG ACTTAGAAAC CTGGATTGT CAGCAAGCTG AGGATAGAGC
CATATTCTTCT AAGAAGGACT CACATTACCC AAGTGCAAAG CCTGATATAT ACCTTCAGAA
UU' UU'

FIG. 6A(98)

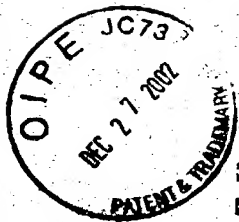


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UU' _____ UU'
TATCAATTTA TTAATTTACA GTGAAGAAAG CCACCCCAGG GCATTCCCCA GGGGAAGGCA
AAAAGAGCTA GTTGCACATT TTGAATGTTT GATGACATTA GGTAAAGGTG ACACAGAATA
TCCATTCCCA CAACTGAGAT ACCTGCTGCC TTAAGGAAGG GACAGGCAAG TCCTTGGGCA
GGACCTTAGA TTGTCACGTG CCATCTTGCT GTAGACTCT CTATTCCAGG CATGACGATG
GCCAACTCTG TCCTCCTACC CTA CTGATGG GATTATCTTT TCTTGACACA TGGCAATGCC
TCCAATCAGA GGCTGGTAGC TATTTTAAAT CTTCAGGGCA GTATTTTCA AAGGAAGTT
CATGGACCAT ATGCATCTGT ATCATTAGA TGTATATTAA AAATGCTTAG TCTTCCCCAG
TTATACTAGA TCAGAAATCTC TGTGGTGGG GCCACGAAAT CGGTATTTTC AACAAATCAC
TAGGTAATT CTGTATATAC TATAGTGTA AGACCCTGC TTGAAGGTTT CTTGCATAT
CTCCACTAAA TATAAAAAAT ATTGACTTCT AGATTAACT CCCAAAGCAC TTGCATTTT
AGTTTCTGG GGCATTATA TTGTGGTACC CCTATACCAC TCACACTCTA GTCAGGAGGT
W' _____ W'

FIG. 6A(99)



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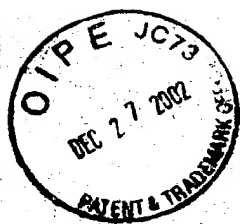
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WW' _____ WW'

ATATTATGGA CTGAATGTTT GTGTCCCTCC AAACTCATA TGTGAAGTC TTAGCTTCCA
ATGTGATAGT ATTAGGAGAT GGTGCCCTTCT GGAGGTAAAA TCAAGCCCTC ATGAATGGGA
TTAGTGCCCTT TAGAAAGAGA GCTCGTCACT GTCTTTCCAT CAATTGAAGA TGCAGTGAGA
AGCTGGTAGT CTGTCATCTG GAAGAGGGCC CTCACACAAC CTGATCATGC TGGCACCTGG
TCTCAGACTT TCTGCCCTCCA GAACTATGAG ATGATAAATT TCTGTTGTTC ATACCCACC
CAGGCTACAA TATTAGGTG CTGCAAAGTA TTTGTGATTT TTGCCCTTAC TTTTCAGGCC
AAAAACTGCA ATTACTTTTG TGCCAACCTA ATATTTGTT ATAGCAGCCC GAACTAAGGC
AAGGAGACT ACATCAGACA GTGTAGCTAT GTAAGTACAA ATGTATCCCT GTTGAAGGAA
AACTAAGTTC TAACCCTGAC TTCAGGCCAG TAGCCACCTT TTCAATCTCT TTCATGAAGG
GACCATATC ATTATCACTG GTGGCAAAAA TAGAGCACGA GAATGGAATT TGCTTTCTG
TGAAATCTCA GTGTATACAG ATGAAGAGCA AGGTTTGTCT TTCACTCTA AGAAGCAAAA

WW' _____ WW'

FIG. 6A(100)

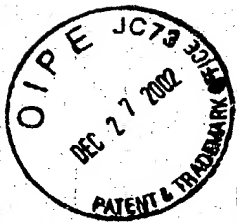


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WW' _____ WW'
GTGAGTACGG ACTGGCACAT TATCAGAGAA AGAATCATTC TAGCTCGGTG GGTCTTAACC
AGGAGTGAAT TTGACTCCAG GGAACAGTTG GCAATGTCTG GAGACGTTTT TATTGTGTAT
AGCTGGGGGA TGAGTGGGTG GGTGCTACT GGCATCTAGT GGTGGAGAC CAGAGATGCT
GTAAACATC CCGCAAAGCA CAGGACAGTC CCCGACAACA AAGAATTATC TGGCCCCAAA
TATCAATAGT GCCAAAGTTG AGAAACCTCA TTCTAGCTTC CTTTTCCCTT CTACGTTCTA
ATCAACTGTT GTTCTTTTCAG CATTAGGATT CATCCAGCAG TCTCTTTCCC CAGCAATTG
TTGAAATTTT TTAAAAATG GACTCATTTT AGTGTCACAA GAAAAAATA CATTACACAG
AAAGGATGGG TCATTTTGTT TAATGATGTT TTGCCTTTCA CATAGCAAAA GCTTAATAAA
GTATTTTAA ATAAAATGGT GAATAGATCA AAACATTAAT TTCACATGTG TTTTAATAAA
TAACAGGAAG ATGGCTATAT TATATAAATT GTTCTTGAT ATGCTTGAG TGGATCATCA
AACACAAACG TATCTACATG CCTTTTCTTG TGAATAGATC TAATAATAAC GCTCTTCTAA
XX' _____ XX'

FIG. 6A(101)



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XX' _____ XX'

AAACAAATTA AATGATATT ATTGCTGAG AATGTAATGC TTGTGTGAAT AGAAGCCAGC

CCTGAATCCA AGCCCCCAGA TCTATTTTAAA GAATTGAAG AATGTCAGAA AAGCACGTGG

CTTCAAGGTT AATGTGTAAG ACTCACAGAA ACTTGAAAAA TCACTATGAC TAAAAAGAAA

GTATGAGCTC CCTGCATGCC TGTAAATTGG AATGACAGCC AAAACCAGTT AATTATAAAA

ACAGCTAATT TAACAGGTTT TCAAATTTGT TTCTTTCTCC AAGTAGCATA TAGTCAATAA

TCCTTAAAGA GAAAGCAAAG AAGGGAAGC ACTGAACCAA ATTGCTTTT TTGTACCTGC

TCAGCTCAAA TGCAGAGTTC TCTACCTGGA AATTGACTGC TTCCATAGTT TGATAGCCAC

AGAGAGATGG GAACAGAAGG AGAGGTATAA TCCCAGACTT GATTCAGCTA TAGAGATGA

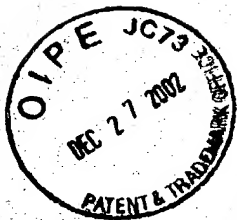
CAATAGTGTC AGAGGCCCTC CAACCAGAGC GACTCCAATCT TGAATACGGG CTGGGTAAAA

CAGGGCTGAG ACCTACTGGG CTGCATTCCC AGGAGGCTAA GCATTCTAAG TCACAGGATG

AGACAGGAGG TCAGCACAAG ACCTTGCTGA TAAACACAGGT TGTAATAAAG AAGCCAGCCA

YY' _____ YY'

FIG. 6A(102)



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YY' _____ YY'

AAACCCACCA AAACCAAGAT GGCCATGAGA GTTATCTGTG GTTGGTCTCA CTGCTCATTG
TATGCTAATT ATAATGTATT AGCATGTTAA AAGACACTCC CACCAGTGCT ATGACAGTTT
ACAGGTACAT TGGCAACTTC CGGAAGTTAC CCTCTATGGT CTAAAAAGGG GAGGAACCCCT
CACCTCCCAG AATTGCCCCAC CCTTTCCTG GAAAACTTGT GAATAATTCA CCCTTGTTCA
GCATATAATC AAGAAGTAAC TGTAAGTATC CTTAGGCCAG AAGCTCAGGC CACTGCTCTG
AATGTGGAAT AGCCATTCTT TTATCCCTTA CTCTCTTAAT AAACCTTGCTT TCACTTTACT
GTATGGACCC CTGTGAATTC TTTCTTGCAA GAGATCCAAA AACTCTCTCT TGGGCTCTGG
ATCAGGACCT CTCCCAGTA ACAATAGTAG TAAGGGGTCG GGGAAACTGG ACAAGGAGT
TTAAGAAGCC TTAGATAAAG GGTCCCTCATC ATTGTCATAA CATAAAATCA TGGACTCCTA
GAATTTTATA GCTGATAGGA TTAGAAATTT CAAAATTCAA TTTCATTAAT TTTTCATCTGC
GAAAACAGAT GGCAGAGAG GCCAAACAAT TTGTTAAGGA GCACTGAGGC GATGGAACAC

ZZ' _____ ZZ'

FIG. 6A(103)

ZZ'

ZZ'

CACACTGGAC CGCAAACTC CTAGCAGAGT ATACAAGGCC TTGATCTCC TCAGTCAGAA
TGAAC TAGAG CTTCCAGGG GTACCCCTTC TGA CTGTTA GCATGTTGC CAGTCTGACT
AATTTGAAG TTGCTTAAAT ATCTGTCATT TCCACTGTAT CATAATCTCC TCATTCTCT
TCAATCTCCA ATGCCCTTGAA CTCAGTAAAT GTAGTTGAA CAAAAGTAAA TTGAACCCAG
AATTCTGAT CATAATCTGG AGCACTTTAA AATTGTCAGC TTACTGGGAA ACGGATAAC
ATGTGATTG TCTTTGATTT TTTTTTTCTC ATATGCTTTT TCCACCTATA GATGCTACAC
GAATGTTTT AAAATCTGAT ATAAAAATTA AAATTA AAAA ATTA AAAA GAAATTTGA
TACAATGCTA CATTAGAGT GTTG TGATTA GATTCCTTAA GTGTATCATG GTGATCTCTA
CATCACGTGG TGATCAAATT GCTTTGGGTT TTAACACATA ACTGACAAAG GCTTGGGGAC
ATGTAAGATC CCAATACAT TTTTATGAT TTTTTTTTCT TGTGTGCTCT CTTTAAATA
ACTTTTTTTT GTTATAAGAA TAATTCATGT TCAGTGGAGA AACCATAGAA AATAGTGACA

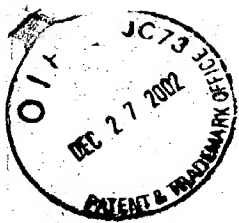
AAA

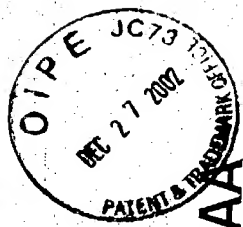
AAA

FIG. 6A(104)

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AAA

AGTGAAGGAA TAAATTTAAA ATGACCCATA ATTGTACCAT ACATTCTGAT TTTTAAACG
CTGAACAAAT TAGCCTTGGG TAAGTACCAG GAATAGAGTG CAGCATTGAA AGTTAAAGTT
TGGGGAAGGA TAGCTGACTT AAGAAATTAT CTAGTTAGAC ATTTTGTGA TGGGTAATT
TTGCAGATGA CATTAGTGAG AGAAAGGACT TGCCACTCTC ACACAGCTAG TAGGGTGTG
GGAGGATATT GGAACCAAGT TTCAAGTCTT CAGTGAAGAA TCAAGGGAGA AGTTCTAAAA
CCTAACAAATA TCCCTCTGGA TGGACATTTA TTTTATTACT ACAATAAGCC ACACGGTGAG
TCATAAGGAG CATTTCATTC TTCTAATAATG TCTCTACTGT ATTTAGAATC TGATAAAGCC
CTATTAGAAAT TCATCTCTTT AAGAATAAAA GAAGCTGAGG AACTAAAGAG AGGTTGGAA
TAATCCACTA ATTATATCCG TTAAGCTTCA GTTACGCTAA TAAGGAATAT CACATGACTG
TGGTGTGTGC TTGTTCTGAA CAGTAAAGTA CATGAGGAAA GATAAGATTC AGGCTGAAA
TGTCTTCAG CATATGTAGG TAGTGGTGAT GAAAGTCATT AAAAGAAAAA TTGATTGAGG

B
B
B

FIG. 6A(105)



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BBB

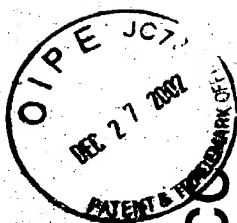
BBB

TATTTTAGTA AACAAAAGAA CTCACCACTT ACCCATCAGG AAGTGATTG TTAATGCAGT
GCTGTTCAGC TTCTGGAAG AAAAGGTTTC TTCATGCTTC TCTCTTAGC CTAATTCTTA
TCCTGTCACT TTCAGGCAA AATTAAGAAA AAAAAAGAT TGAAAACGAT GCTCCTATTT
TATTGCTTC AAAAGAAACA GGCTGTTGCA TTGTGCTTGG AACAGTTTAC TCTTGGCCTT
GATGTAAGTG TGAAGGAAG CCCATGTAAT TGAAGGCA GTATCTGAAG AAGCAGGAAA
TACAGTGTTA AGAAAATGAA CAGGCATGAA AACCATGGCT ATTTGATAAA AGTAAATAAT
TTCTGCAGTT CACATGTTCT CAGCATATTT TCTTTGATAC TGACTTGCTT AATATGACAA
TAGCAGAACC ATGGTAGCTT GTAGGCATTA CTTTCTTTT AATTCTTTT ACATTTTGAA
TTTACCAGCA CTCACATTG TATTACTTTT GGGTTACT GAGGATCTAT AACTTATAGA
TCAAATACCT GACATATATA TGCATTCTCT GAAGTCTTAG GGCAGAACTA GAACATCTT
GTGAACATCA GTATAAGATA TTAAATGGA AGTTTGCCT AAGACTGAAG ACAATAAAA

CCC

CCC

FIG. 6A(106)



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CCC

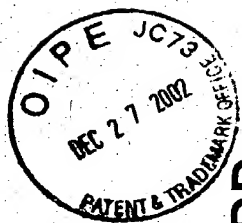
CCC

TATCATAGTC TGAAATGAAT GCCAGCAC CATAAGGAT TTAAATATCT ATACATATAT
ATGTGTGTGT ATTATATATA TTTAATATAT ATCTGTGTGG GATAGGAAGA GGTAGGGGGA
AATCAGTTT ACAATTATTA AGTATTTTAC CCTTGACAAG AGTATATATA TTGGAATCA
GTTGGAGAGT ATTTTCAAAG ATAAATGTTA GTGTGCTATG AATGAATCCA CCCCTACCAC
CACTGAGGCA GGTAGGAGA GGCCTGTGCT CCTCAAGCAT AGTTGGAAA GGACCTCAAC
AAGACCACTT CAAGAGTCTA ATGTGTGGAG ACTGTGTCTT AGGGAGACCT TATGGTCTAG
CTTCTGACTC ACAGCTAAGT CAGGAGACA GGTGGCTGC TCTGATCGTG GAGTCCAAA
GATGCCCTGC ACTGAAAAGC CTCATGAGTG TTGACTTAGG GCTAGTCTAA GAGTCCCTG
GAAGAAGAAA CACTCAGTAG GAGAGAAGCT GGAGGTACCT TCAGTGTGA ATTGGAAC
GATTCATTCC CCCGTGGAGC AAATTACATA GGAAGATGC CCAGTGATGG AGAGTGGGG
TGTCCTAAC AATTACCCAC CCACTGCCC CACCCTAAGA AAAAGAAAT CACATACAAC

DDD

DDD

FIG. 6A(107)



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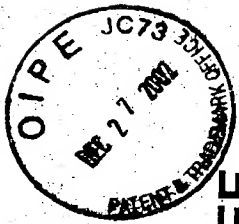
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DDD DDD

CAGTCAGCTG TAAACATATG CCGAGCCTAG TAAACTCAGA TACTAAGTTA CCAGGGTACC
TGGCAAGTAA GAACATTCCT GATTCCCTTC CTCTCTTCTC TTTGCCCTCC AACCTTAGTG
GCTAGCAAGA TGGGAGAGG AGGAGAAGCT GTAAGTGGG AAAAAAGAGC AGCTTCTCT
CCTTTTCAGC TGCTGGATTC TCCCTCATCA TAGGCCTGAG CTGGGAATC AGGAAGAAGG
ATTCTTTTAA AACTGAAGT AACGTTATCA TTTAATTTA AACATTTTA AATTTGACA
ATGTTGAGAT TAGATATACT AATTATTAA CTAAGATTAT GTTTTGCAGC TTGAAGTGAT
AAGAAAAACT CTTATCTAAG AGCATCCAGG AAAGTCGGG GTTTCCTGAA CATCCTTTTA
AATCCTTTGG AAGTCAGCTT TCAGAGAGGA TTAAAGTGT AGACTGGGCC TTCAGAAACT
TGGTTAATGT AGGGGTTTCC TATGCAGACT TGGGACTAT ACCTTGTGT GAAGAGAGAA
AATAAGATTA TCTTACATT TTCCCATTC TTTTCAAAA AGAAAGCTCA GCTAGCATGA
AAGTTAAATT CAAAACGTAA TGGGTATTAT TTGCATATTC AAATCTAGTG CATATCATGT

EEE EEE

FIG. 6A(108)



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EEE

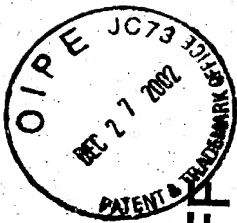
EEE

AAGTACTGAA TTATGGTATT CATTATTCA AATGACAAGC TGGATTTTTT TTTCTTTTCGA
ATTTCACAAA TTAATTTTCC TTGGAACCTT TTGGTTTGGG CTTTAAAGAGT TTAGGCTTTC
ATCACAAAGA GAGACAGCC TTGAAGATTA AAGTGTGTGG CTCCTCTCAA GATGTTCTTA
GTCCAGCAAA GGATTCATG CATATTTGGG CTCCTCTCG TCTCATAACC TGTATTTCTT
GATATTCTAT TTATATTCTG TAAGATTTTT TTTTAAAGG AAAAATCTT CCATGGTTGA
AGGACATGTC AAAAATAGAG GATACAGTTT TATATCAAAG GAAGTTTCAT GATATGACTG
TAGAAGCTCA TTGACTTAA GACACATCAT TTCCTCATGG AAGTGTTAAA CAGATCTGTA
CAATAAGGT GGCAATCTT GTGAAAACA GTTTTTTTC TCCTGCTCTA AAGAAAGTGT
ATATTCAA ATGTGAATGT CAGCAGTCAG AAAATAGTAT TTTTTTAACT TCGTTTTCOA
AGTCCTCAA AACCTGTACC TAATCATGAA TTTTTTTTCC CACAGATTGT TTCTTCTTCT
CCCTCCCAGA AACTTTGAAG TTTTCTTACA TGACACCAGG ACCATGTCT TTTTTTAATT

FFF

FFF

FIG. 6A(109)



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FFF

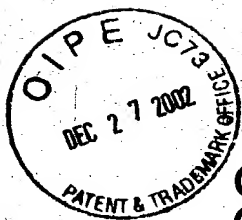
FFF

ACACAGAAAT GAAAGAAAAA AAGTGTGTG TATCGTTAAC CAAATATATG AAATCTTTAA
GCTGTATTTT TATTTTAAAC TTTGTTTTCG AAAGAGGCCA TTCCCTTTGG TTAAATAAAT
TGTTATTCAC AGTTTCCTTG TCCTCATATT ATCAAGGGA AAATTGTAGA AATTTTAAAG
GAAGCTCTAG GCAATGTTTT CATCCCTGAA TCTTTGGAGA GTTATAAAAA CAAACAGATT
ACTGAACCTG TAAGAGAACC AATCGTGAAG TCATTACATC TAAGCATAAG CAAAATCTCC
TCTTGATCA TTAAGTTATA GAAGAAAAGA AAGCTGCAC TTGAAAATT AGATAAAGCT
TGGTAACTTG TAAGTCAAC ACGTAAATT TTACAATTCA GGAATATCGA TAGCAGTTGA
GTTTAATAGA CTTCTCACAT TCCAAATTTA AAGCTTCCCTT CTCGTGCTA ATAGAGATAC
AATAGCAGTA GCGTTTAAAG AAGAATGAAT CAACAATTTA AAATAATAAT GTGTTTTTA
TTTATCTCCC TTATTCACAT ATATTGTTT TGTTTTGAGA AGAGTTCTG CTCGTGCGCC
CAGGCAGGAG TGCTGTGGCA CGATCTCAGC TCACCGCAAC CTCGCTCC CGGTTCAAG

GGG

GGG

FIG. 6A(110)



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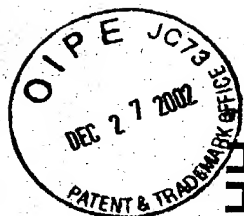
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GGG _____ GGG

CGATTCTCTT GCCTCAGCCT CCTGAGTAGC TGCATTACA GCGTGCGCC AGCAACCCCG
GCTAATTTT GTATTTTAG TAGAGACAGG GTTTCACCAC GTTGGACATC TTGGTCTCGA
ACCCCTGATC TCAAGTGATC AGCCCGCCTC GGCCTCCCAA AGTGCTGGA TTACAGGCGT
GAGCCATCAC TTCTGGCCCT TATTCGCATA CAATTAAAA ATCATCACAG AAGTTTGAA
AGAAGGAGG GGCAGAAAAT TACCTACTTT TCCTCTCCCC AGCGATCTCC TTCAAATCTG
TGCCTTTTCC TCAGGCCCCAG GCCTCAATT ACTGAGCAGT CACACCTCAC AGAGGGAGGT
CTGGGCAATC CACTCTTGGT CACAGGAAAG CCATTGACCC TCCCACTTCC TCTCCTCCAC
CTTGTTCTCA ACTCTTGACT TTGGGCTTG TTTCTGTTCA AGTCCTAGAA CTGGTTTCTT
TTATCAGGTT AGTGATTAG TTCTCTTTCC CTCTAGTTGC TCTCACTCCC TGA CTCTTGC
CTTCTGTAAC AACTGGAGAC AACTCTTTCA AAACCAGCTC CAAGCCCCAG ACTTCTCTCT
GGGCTTTAGT TCGTAAGGCA GGTGCCCTAC TGAGTGAGCC TAGATCAGAC AGAAACATAG

HHH _____ HHH

FIG. 6A(111)



三

三

CTGTTGGCAA GGATTTAGGT GAATTTCCCTT CCATTGTTTT TCTAATACCT TTTTTTTTTT

TTTGTAATA TAACCATGCA CCTACACACA TATTGAATA TCCTGCCCTT TTATTTAAAA

TGACATGATA GGTCCGGGAG TGGTGGCTCA TGCCTGTAAT CCCAGCACTT TGGGAGGCCG

AGGTGGCAG ATCACCTGAG GTCAGGAGTT CGAGACCAGC CTGGCCAACA TGGTGAAACT

CCATCTCTAC TAAAAATCAA AAATTAGCCG GGCATGGTGG CAGGCTCCA GCTACTCAGG

AGGCTGAGAT GTGAAAATCG CTTGAACCCG GGAGGTAGAG GTTGCAGTGA GCTGAGATCT

TGCCATTGCA TTCCAGCCTG GGCAATAAGA GCGAACTCC ATCTCAAAA AAAAAAAA

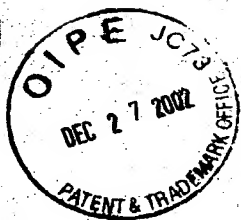
AAAAGACAG GATAAACATT CTAGATAGTC TCTATAATGG TCATGATTAA GACAATAAAA

TAGTCTGAAA TTGTCAATAT ATATTAATAA TAATTATTT GCCATTCTG CCAAGTAGCA

GACACCTGTC ATTCTGCCCC CTCAGCACCT CTCTTTCTTT TAGGGAATG CTACCCACTC

TTTGCAATGG TTCTGGATGG AACTGTTGAT CACAGTGTTT TCACTCCCCA TTTTGCTCA

FIG. 6A(112)



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III

III

CCAGAGGTAG ACAGAAGACC CAAGCCAGGC CAGTTACACA CAATCTTCAG ATAATTACCG
TATGATCAC AGTATCACCC CACTCAAGGC TTGGTTGGAG ATGAGCAGAA GAGACTAAAG
CTGGGTCATT TTAATTAAACA CCTGTACCCC AAAGAAAGAC TGTCAATGAG GCTTTTATAC
CGACACTCCT GGTTCCTCATT CTTCCTGATG CCATTCATTT GACGAACTAC CCAATCTTTC
CAACAGTGTC TTTGGAAGAA AGATAGTCAG AAAAGAAGAT AGAGTTGTTT TCTGTTCTTT
GCAACCAAGG AACTCTAAAT GATAGACTTG TTGCTAGGCA CTTGGTTAT TTTTATTATC
TTGAATACTT CTGTGATATA CTTCCTTGTC CATGCCCTGTT TGTACGGATG TAGCTTTTTA
TATATTTTAT ATAATTCTC AGAAGTGGA TTAAGTATG AAAAGGTATG AACATTTTCT
GATTCTTAAT ATAAATTGTG CAAATGCTTT TTAAGAAGAT TATACCAGTT TACATTTTGT
GTTATATATA ACAGAAAGTA CTAAGTAAAA ATATTACAAA AATTGCTCT CTGTCAGGA
GGACTTGTA TAGATGATA AGTACTTGAA ATAGGAACAT AGAGCATTT CAGTTTAAAA

JJJ

JJJ

FIG. 6A(113)



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JJJ

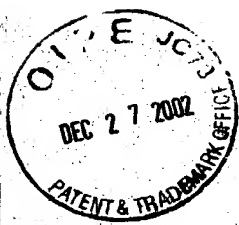
JJJ

TAATTTCATT GGGTTATTTA CGGAATCCCTT AGAATTATGG CCAGACATTT ATAGATGATC
TGTACCAAAC CTAGTTGGTT ACATAAATTG CTTATTCAAC TGGCTTAAAT CTATAATAGA
AAGATGACAC TTAAGTGAATG TTAAATATAC ACTTTGTGAG GGGCTTTGTA TTATTCTATG
ACATCTTCAA AATGACCCCTA CTTTCCCTATT TTATAAGTAA GGACAGGAAG GCTTCAAGAA
CATGACTAAT TTTCCCAAGG GCTGTACCAA AGCCAGAACC CAAATCTATA AGGCTTTTAA
ACCTGCATTC TAAAACGTCA TCTCGGCCAT CTTATTCCCTA CAGAACTAA GGTTAGAAAG
CCAGATTGGA GTCCCAATTT CACCACCTAG TAACCAGACA AACTTGAGGA ATTCACTCAA
CGTCTTTGAA TCTCCATTTC CTAATCTTTA AACTAAAAC AATAATACTG GCCCTACCTA
TTTCCTAAAA TTTCTGTGAG CACATAGAGC TAGTGTGGTA GAGTGTGTA CAGATGTCAA
GTGTTAGCGT GAATTACTTA GATCCCTGAA CACCATGGAT GAATGTGTCT GACTGCTATT
AGAGGTCATA AAGAATATTG GGGCCAGGTA CATTGGCTTA TTCCCTATAAT GCCAGCACTT

KKK

KKK

FIG. 6A(114)



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KKK _____ KKK

TGGGAGCCTG AGACAGGAGG ATCACTCGAG GCCACAATTT CAAGACCGGC CTGGGCAACA
TAGTGAGACC CTTTCTCTAC AAAAAAAAAA AAGCAGCCAC GTGTAGTGGC ACACACCTGT
AGTCCCACAT ACTCAGGAGG GTGATTGGG AGGATAACTT TAGTCCAGGA GTTCAAGGT
GCAGTGAGCT GTGATTGCAC CACTGTACTC TAACCTGGAC AGCAGAGTGA GACCCTGTCT
CTAAAAAAAA AGAAAAAAAA AATAATAATA ATAAAGAATA ATGGCCCTTG GGATACCCAC
TCCTCTCTTT CTGCTCTGAG TTGTGAAGCA GTTGAGTTAC ATATGCATGT CCAATGGATG
AGGTTGAAAA TATCAACTGG ATTGGAATGT GGCTTACTTG CGTGGCCACA ATGAGCTTCG
TAACACTTC TGACAGGGTG AGAAGACAAA CTTCCCTCACC CAGTCACTGG CAGAGCTGGA
CACTCTGTGT CTCTCCCACA GAACAACCTC TTA CTGCATG GAGGTGGATG AAAAAGTCAA
CCGAGAACAG GCTACTCCAA AAAGCAGAGC ACCAAAGGCA CCAGCTGGTC AGGTCCCCCT
TCCTAAGTAA ACAATCACGT AATTCAATTG GGACAAAGCC AGAGAGGTGG TGTGGAGAAA

LLL _____ LLL

FIG. 6A(115)

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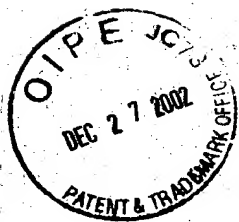
LLL _____ LLL

GAGAGGCAG TTTCCTCCCA AGTTTTTCCT GGAATTCCTT ATGGGAATAT GAGGTTTAGG
GGAATAAGAC TTCCCTTTAA CAGTGAAGAA TCCCCAGCTC TATTGGTAAT AGGAAATCGC
TTACAAGGAT CATGGGGAGT ATTTCCTCAG CTCGTTCTGC CTCCTACTTG GCTGAGTGGA
ATGGAACCAT CTGTGGCTGC TGCATATGAT ATTGTCAACT TTGTCATTCC ACACCCACTC
CTTGACGCC TACCATGTGG TCATAAGACT CCTTTAAAG TGTTCCCTTA AAAAACAAAA
TGTTGTTTGT TTCATATAAA TACAGCTCAA TGTCAGAACC CTGTCTTGT TTGCTCTCTG
ATGTAACCCCT TTCACAATGT TTGGGCAGCT TATTCTCTCT ATTTCCCTGT AGGGTCCCAT
CCAGGCCAA GTGAGTGCCA GCCTCATTG GGCAGCACAT GCCCTGTGA AGGCAGGAA
GAGACGAAAG CTAATTGTAA CTTTGTGATT AGCTGTCATG GATGCCTGGT CCTGTCAATA
GGCTCAATA AAGCCAGAAG GCCAAGCGTT CGCTTCTGCA TACTGATTGC TGAGTCAGAT
TTCTCAGTGC AGAAGGGCTT TCTAGGCAGT CAATTTTGA ATATTAGTCT TGGTTCTTAA

MMM

FIG. 6A(116)

MMM



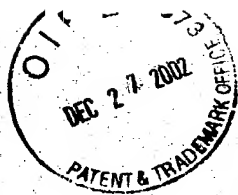
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MMM _____ MMM

GTGGTTAAA TCCCTAGCTG GTCTTTAATC TGAGCCTGGA GAATTAGTT AGGCTGACA
TTCTGCTGTG ATATTTTTC CCTCAATATA TATGTCTTTC CTCCATCTCT TAGATCCCCTG
AATCATAGAG ATATATATGT TATATAATCA ACTGTCTCCA GTCTCTAAGA GTGATAAGTA
CACATTGTGT CAGGTGAGG GGACAGGAGA ACTTTCAAAA GCCTTTCTTG CCCCTTTTTC
CTTCTACTG CCTCCCACTA AGTCCAGCCA CTTATTATTC AGCTGACACT ATCATCATGA
CCATGAGTCT TTTGGGGCTA CCCTGGTTCG GATCCTTTTC GAGGTTTGT GCTTAACTCT
GTCTTCAGTC CTATGGAGCT GCTTTTTC TAAAGTTTCTA TTTTGGCTAA AGTTGGCCAG
AATCTCCTTG TAACCAAAGA ACAAATAAAA TACCAGCTTG CAATGTTCTA TGTTGCTTCC
ACCAAACCTA TGCAGCACTT CCTATCTAAT CCACCTACTA GTCTTTTTTT TTTTATTTT
TTTGGAGACG GAGTCTCGCT CTGTGCTCA GGATGGAGTG CAATGGTGCA ATCTCGGCTC
ACTGCAACCT CTGCCTCCCG GGTCAAGCA ATTCCCCGGC CTCAGCCTCC TGAGTAGCTG

NNN _____ FIG. 6A(117) NNN



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NNN _____ NNN

GGACTACAGG TGCATGCCAC CACGTCCGGC TAATTTTGT ATTTTAGGAG AGAGAGGGTT
TCACCATGTT GCCCAGGCTG GTCACGAACT CCTGAGCTCA GGCAATCCGC CCTCCTCGGG
CTCCCAAAGT GCTGGGATTA CAGGAGTGAG CCACCTCACC TGGCCCCGAC CTA TAGTCT
TTAGTGTTG CTTCCTTCTA TTGGGTAATT GTCTGTTTAT ATGCATGTCT TGTTCCTCA
AATAAAATGT GGTCTTCTCA AGGGTATTGG CCCATGTTCT ATCCATCTGT AGATATCACA
GCACCTAGCA GTGTCTTTCA CAGAGGAAGT ACACAACTGG CATATTGAT TCATTGCTCC
ATTTTTCCT TCTTTATCCC CAGCATTTCT CAATAATTTC AAACATCTCC ATTGGAGTAC
CGGAGAAAGC AGGTAGCTTT ACTTGCAGCT ATGTTTCTAT CCCCATAGTA ACTAAAGAG
GACCCAGAGA AACATGTTTA AATGCTGTCC TGTATCAGG ACCTCAGCCT TCTGATGCTC
CGTGGCTTG GGGTTAATGC TTGATCATTT CCTCCCCAAC CTACACTGTG TACCTATGCT
AGTCTCTTCA TGAGGACTAA GCCCCATAGT AAAAGGGCTA GATAAATAGA AAATCATTTT

000 _____ FIG. 6A(18) 000

000 ————— 000

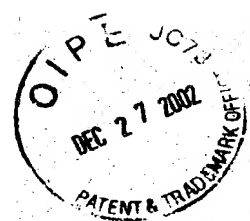
ATGTAATTAT AAGAATGAGA ATACTGAGTA TTA CTGGTGT TTGTTTAGGA TAAGCACATC
TTTATTTGTA TGAGAAAAG AAAAGAGAG TGA AAAATAT ATTAACGTGC ATATAGTTCA
GGACCATGGA TTGCAAGTGA CAGAACTCA ATTCAAACCA ACGTAAGTCA AAAGGAAAAAT
ATATTGGCTC ATGTAACCTT CTCACAGAGA GGCAGGATG GAAGGGGCTT TGGGAACAAG
AGAATTGTTT TCAAATTCTA GGAATACTAG GATTAGTCCA GGATGGGTCA CCTTCCCTGTC
CCTGAGGTGG TGGTAGCGAT GGTAGAGTCT TATGGGAGGA AAGAGTGCAT GTTAGGATGA

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PPP ————— PPP

FIG. 6A(119)

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PPP_____PPP

AGGTAGGGCT AAGCAAACAA GGGCAAGGGC CACTATATCA TGCTAAAAAT GGTTTTITTT
GATGCTCTCC TTAATTTCAC AAATGCTTCC AACAAAGTAG CACACAGGAA AAAGAACATA
GGGACTCTAC TGGTGGGTGC TTTTATCTTA AGCCTTGTAC TTGCTTTTCA CAGCTTACTC
ACTGCTTGTA CCTGAGGCCA TATGCCCTGT AAAAGCTTCT GCAGGGTTTC TACTAAGCTG
GGTTCCTTAT ATGGCTCTCT CCCATTCTG TTGCCCTCACT CTAGTGATCT TTCTCTTTTC

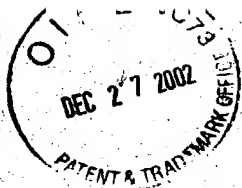
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QQQ_____QQQ

FIG. 6A(120)

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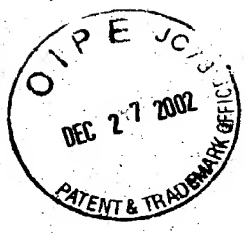
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QQQ _____ QQQ

CTCACCTCTG GGA CTGGTGG CTGTTTGAT GGA CTGCCTT AGCTTGTCTT TGGGTTTTTT
CCTGGGGACA ATGTCTTCAG ATTATCCTAG ACCAAATAAA CTACAGCCAC TGGGCCAGGC
TCTTCCTCCT CCAACTGGAC CATGTTCCCA GGGCTCTTCA CCTAGTTA GTCAAGCAT
TCTTGGCAA AGAAAGGCCT AGTTAACAAT AGACATTCTA GCAATTGATT CTTTTTGACA
TGTTGTAAGA TCTATTACACA TTTTGTAATT AAAGCATTC CCTATGAAA CCAACACGAA
CTAAGCTGCT CCTGGAATGC AGGTGGCCT CCTCAATACA GGATGTTCTA GAGAGCTGTA

RRR _____ RRR

FIG. 6A(121)



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RRR _____ RRR

TTTTGGGCAC TTAACATTC TCCACTACTT AGGCACAGC ACTGAAATTA ACACCACTAA
GTTTGTCATG TCCATGTAGT TAGTCTCAGG CAGTGCAGCC TCAGGAGTGG AACTGACCTC
TTATGTGTGT CCAGCCTTTC TTCCCTCAGA AGTCAGCTGT GTTTTCTGCT GACTCTCCAT
AGGAACATCA GTCCTGAATC CTCAGACCAC CATCTGGAGT AGTAAGTGCT CCTGACAGTC
CTAGAAGTTG TCTACCGCTG GATCTCCAAA GCGTGTGACA CACCGTGAGA GAGAAATGAG

SSS _____ SSS

FIG. 6A(122)

SSS

SSS

AAAGCTGGGC TCTTCAGGTA AATCTTGCTT TTTTACAAGC CCCCTAATTT TACTGCATAA
TTATTTTGAA TTCACTGATA ATTTCTACAA TTTTCCCATTA AGTCATCTAC ACACAATACC
CTCTCATGCA ACACTTGGCT TTGCTAATAC ATATCTATTA TGAGAGCTGT GCTTCTTAAG
CGTAAATGTT TTATATGCAC TAAGGCTCTT GGCTTACATA TAAAAGGGGT ATTGAGCAAT
GTGATACAGA AGTCCTTTCT CCACAGGTCT CATATGTAAA GAATTCATTA GATTGGCTGA
AATAGACTGA TCTGTCCATT TCTCTGCTCA CTATCATATA GGAAGTCATT AGCTAAGGAA
CAAAAACACT AATCTATGTA ATTAGAAGAA CAAGCTGGTT TTGCTCAATA TAAAAATAAG
AAAAAGAAC CATGTGAAAG TCAAAATATT TGTTAATCA GGTCAATGAG AATCTATTAA
AAAGTATTG AATCTTTTAT GATGAGAACT ATCTTGACTC AAGTGGACAG TGGTGAGCTT
TTTGGCCTGT GGTCCCCTACG TAGAAAGGAG GCTTTGTCAT AAAGCTTTAT ATGGTACAGG
TGCCAAAGTA AGTGCCCAAG CTTGCTCTTA AAAGCATACT GGATTTTGTT TTAGACTTTT

TTT

TTT

FIG. 6A(123)

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TTT

TTT

AGTGAAGTGA AGGGAATAAA CAAATCCCTC TGGGAGAACT TCTCCTCCAT CCTTGGTGAA

GTCAATTCTGC CAGAATTC

FIG. 6A(124)

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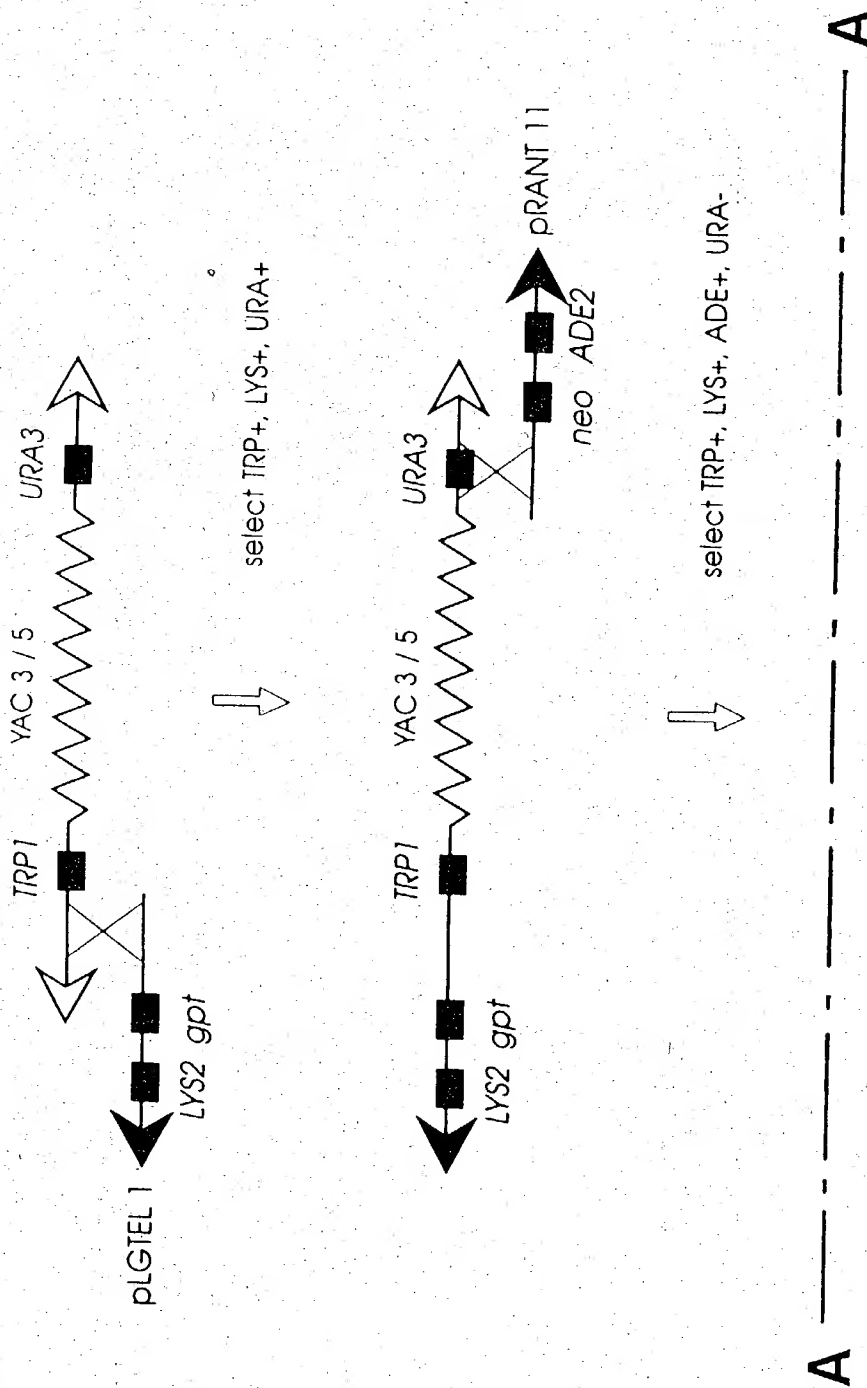
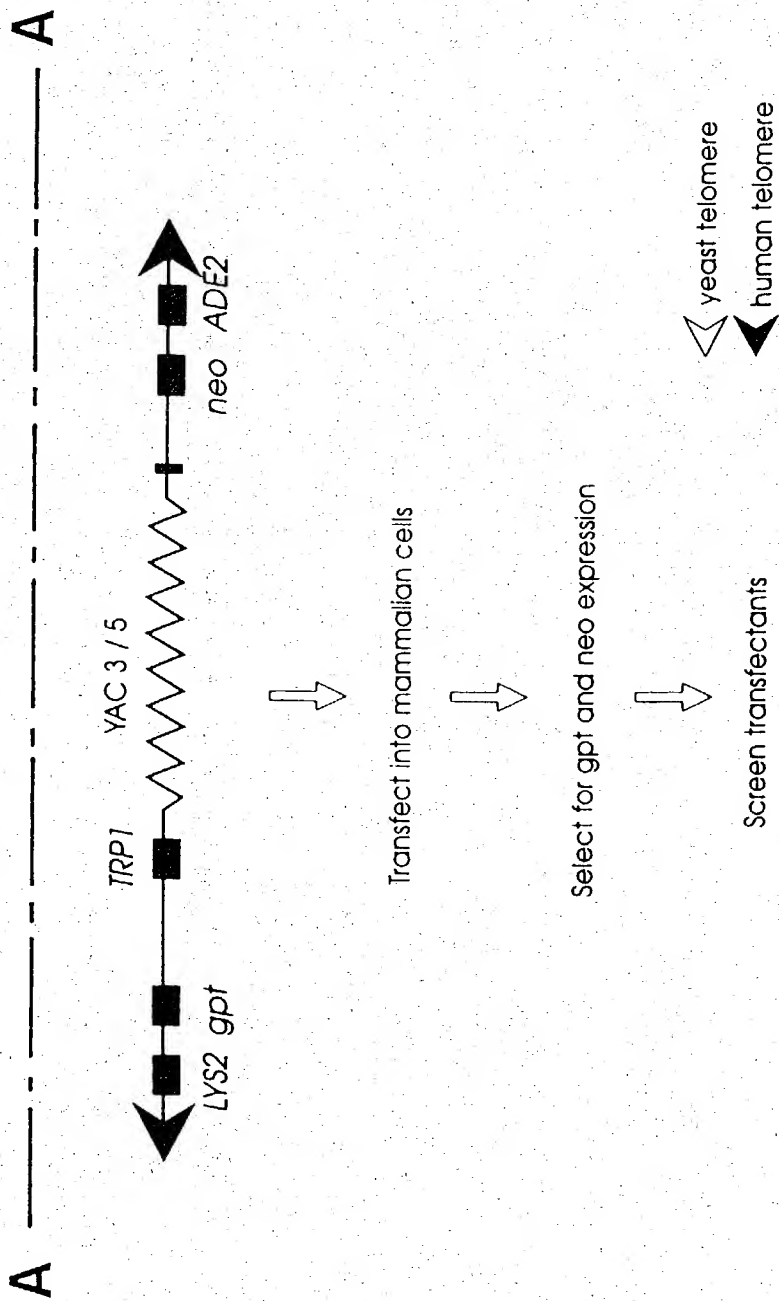


FIG. 7A



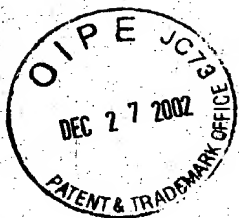
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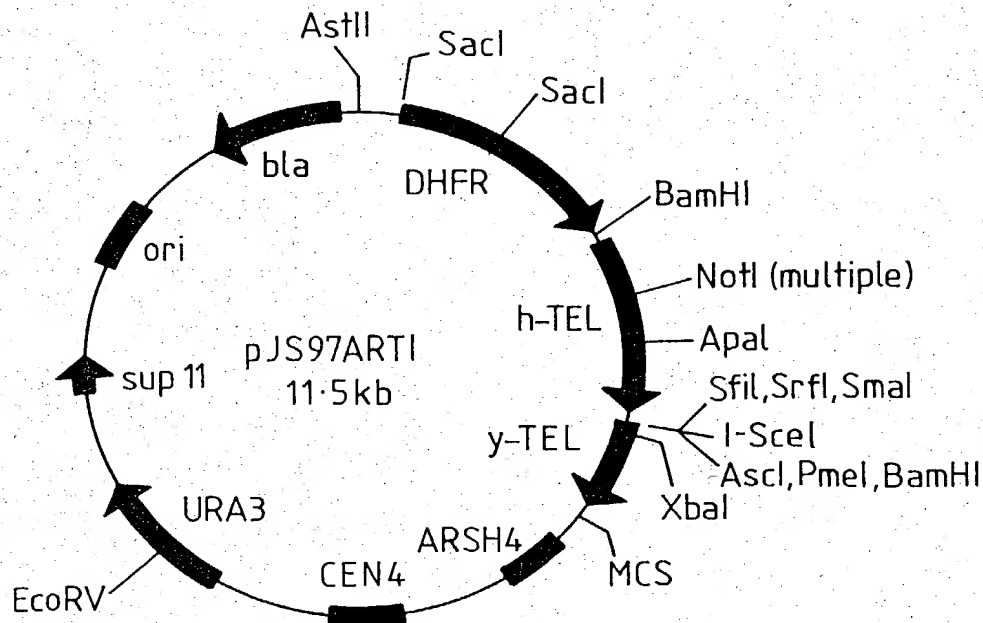
Procedure used to retrofit YAC 3 and YAC 5.

FIG. 7B

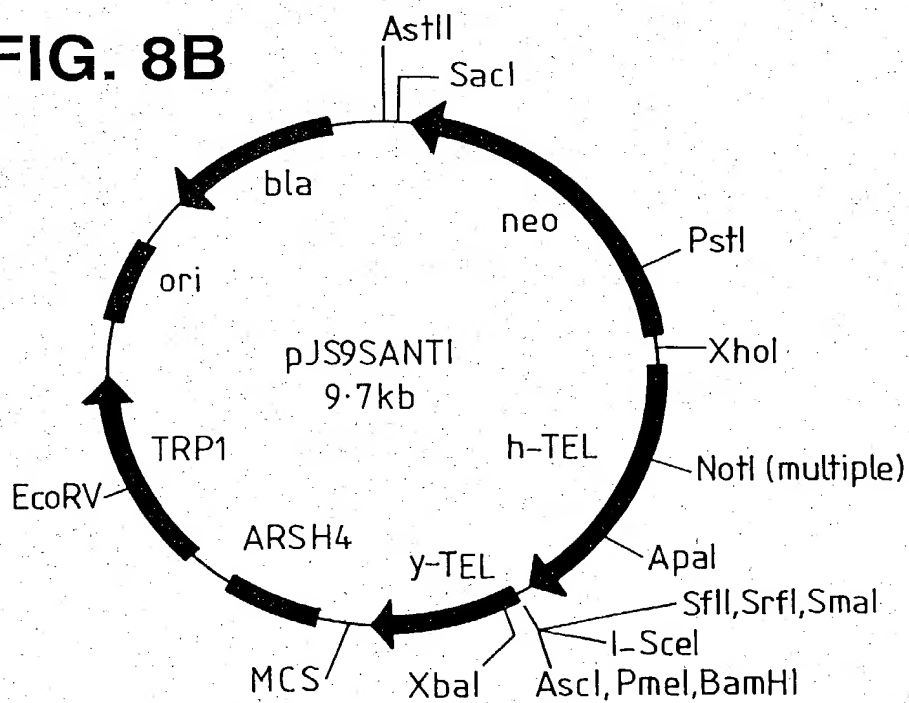


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FIG. 8A

MCS = T7, EcoRI, BglII, NotI, XmaII, SstII, SalI, NruI, NheI, BstBI, ClaI

FIG. 8B

T7, EcoRI, BglII, NotI, XmaII, SstII, SalI, NruI, NheI, BstBI, ClaI

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FIG. 8C

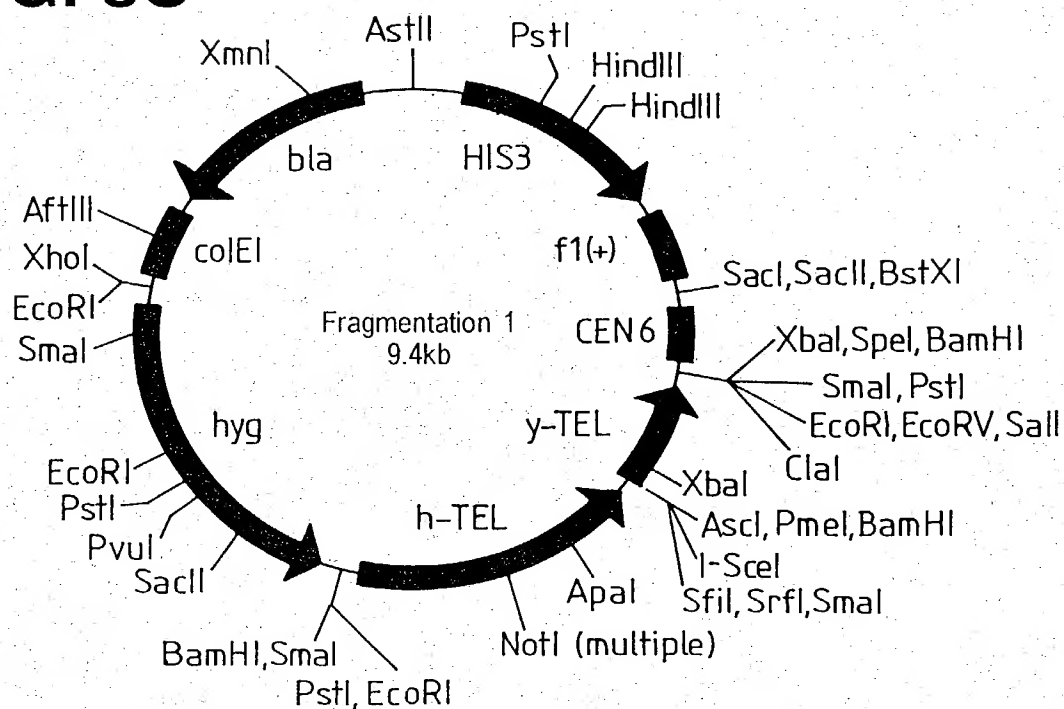
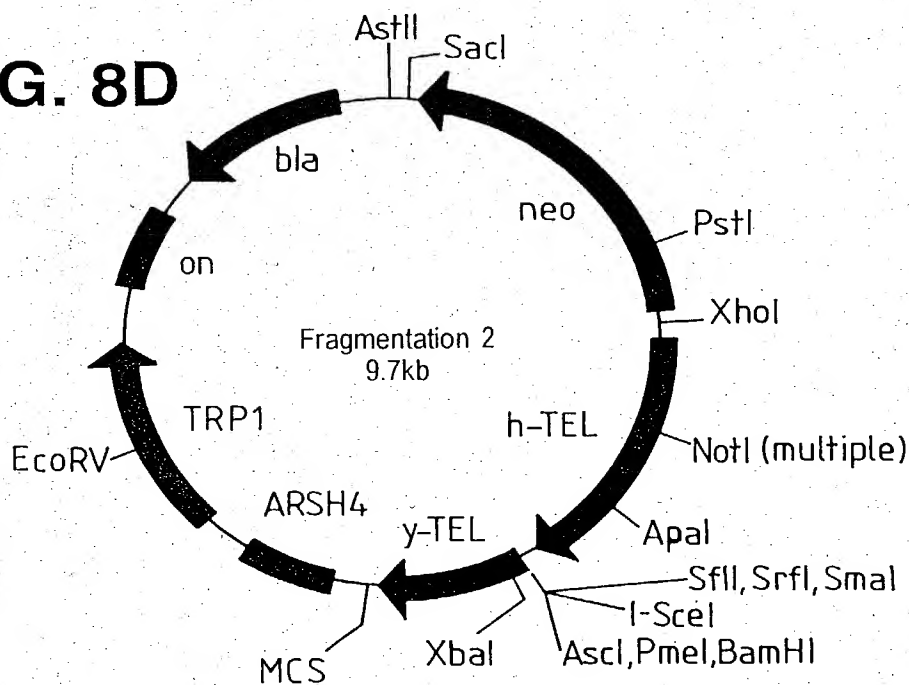
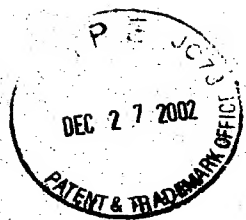


FIG. 8D



T7, EcoRI, BglII, NotI, XmaII, SstII, Sall, NruI, NheI, BstBI, ClaI



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FIG. 8E

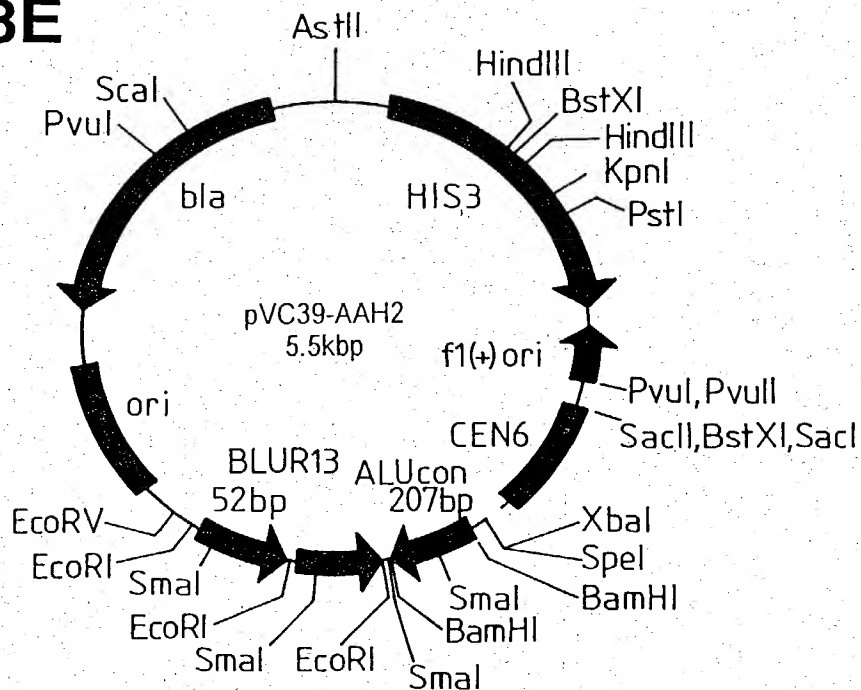
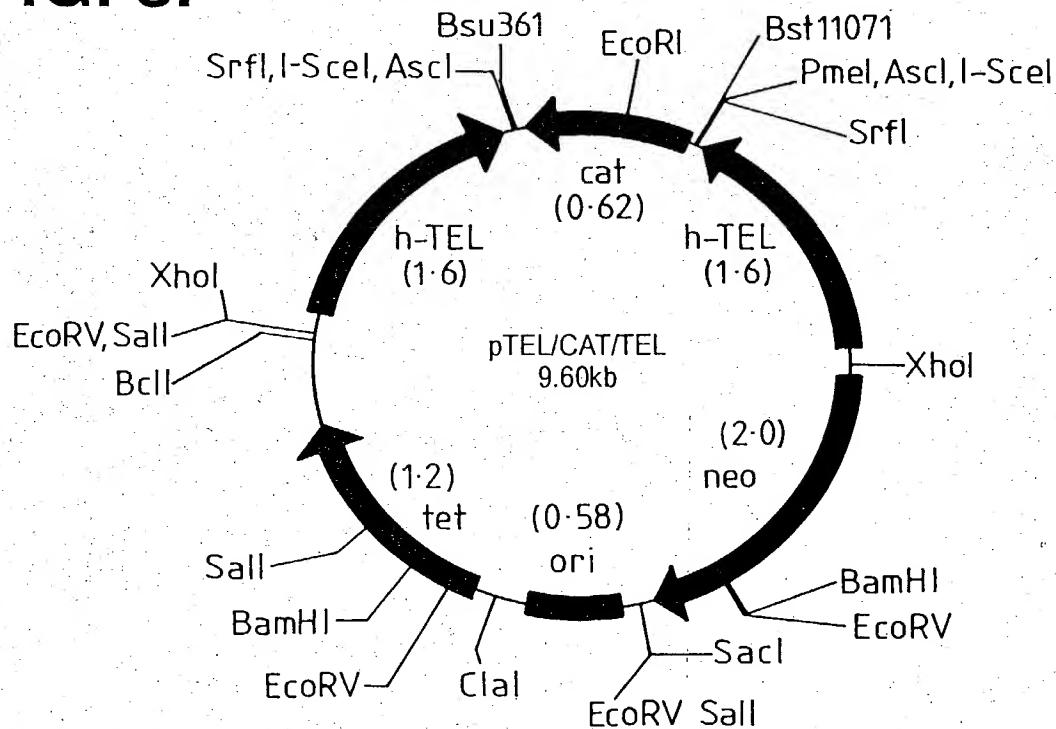


FIG. 8F



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FIG. 8G

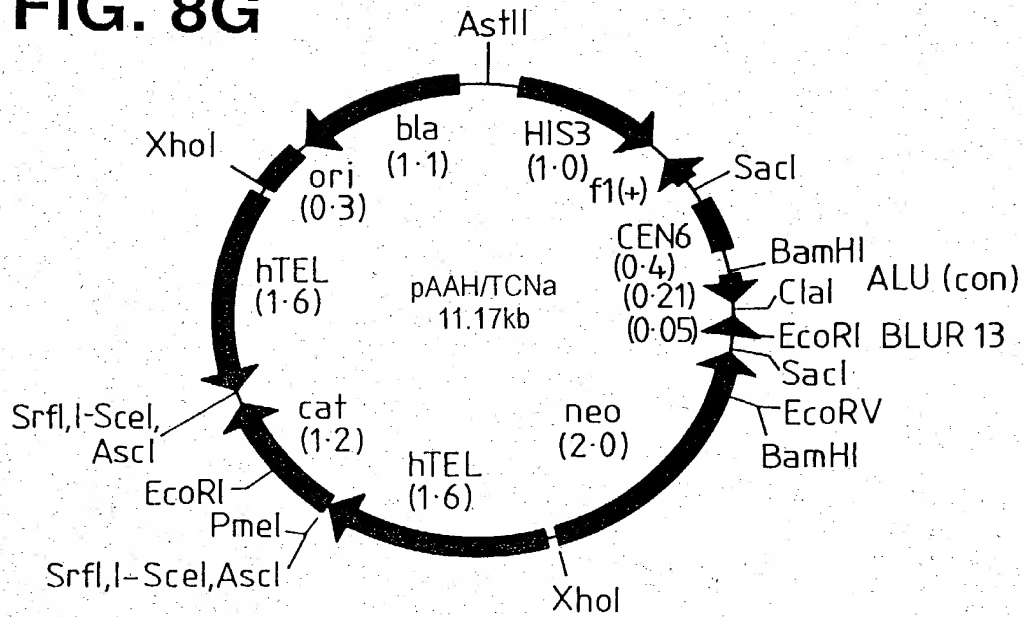
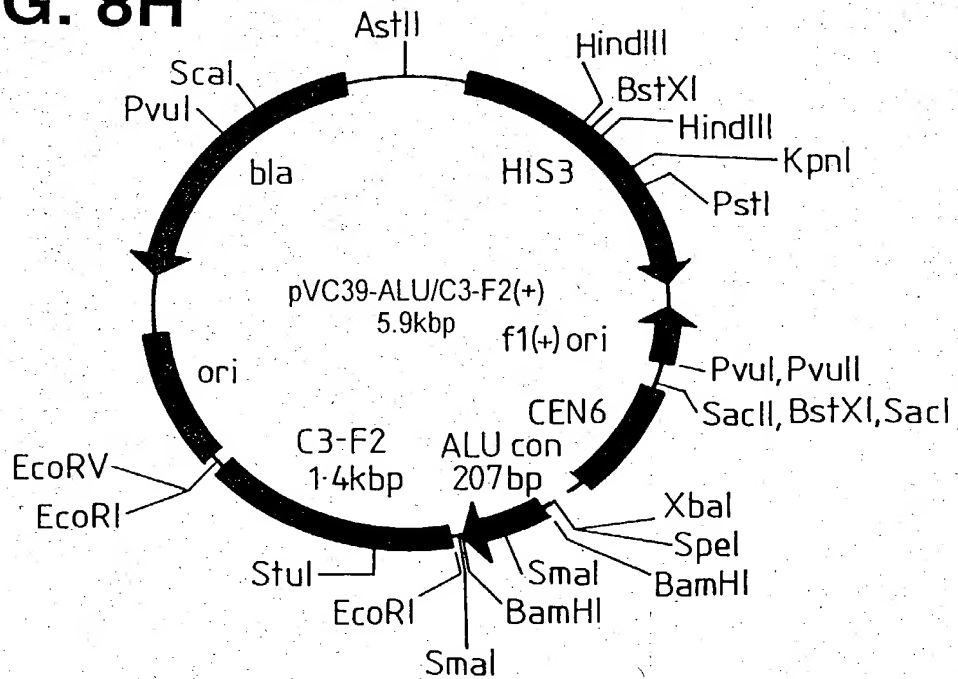


FIG. 8H



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FIG. 8I

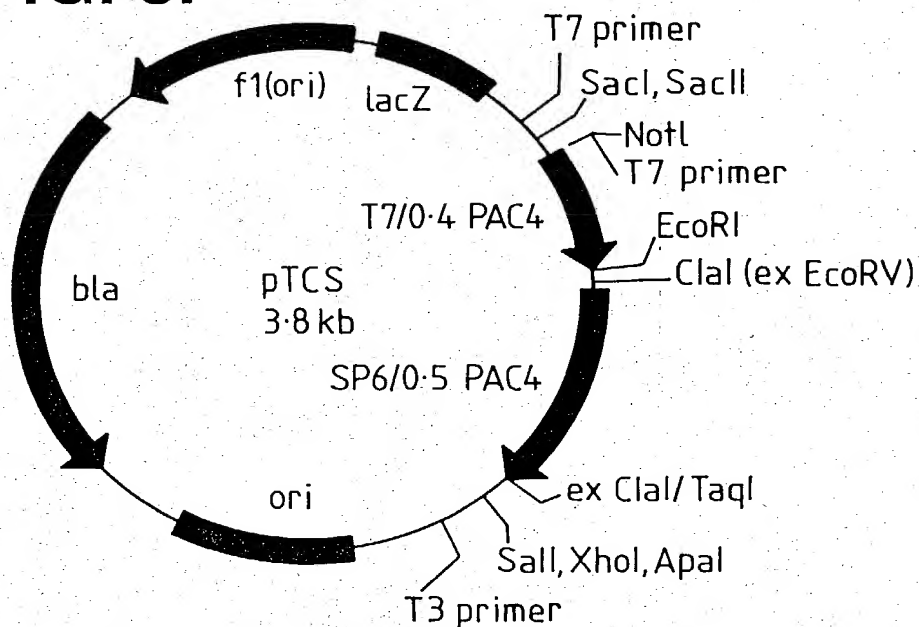
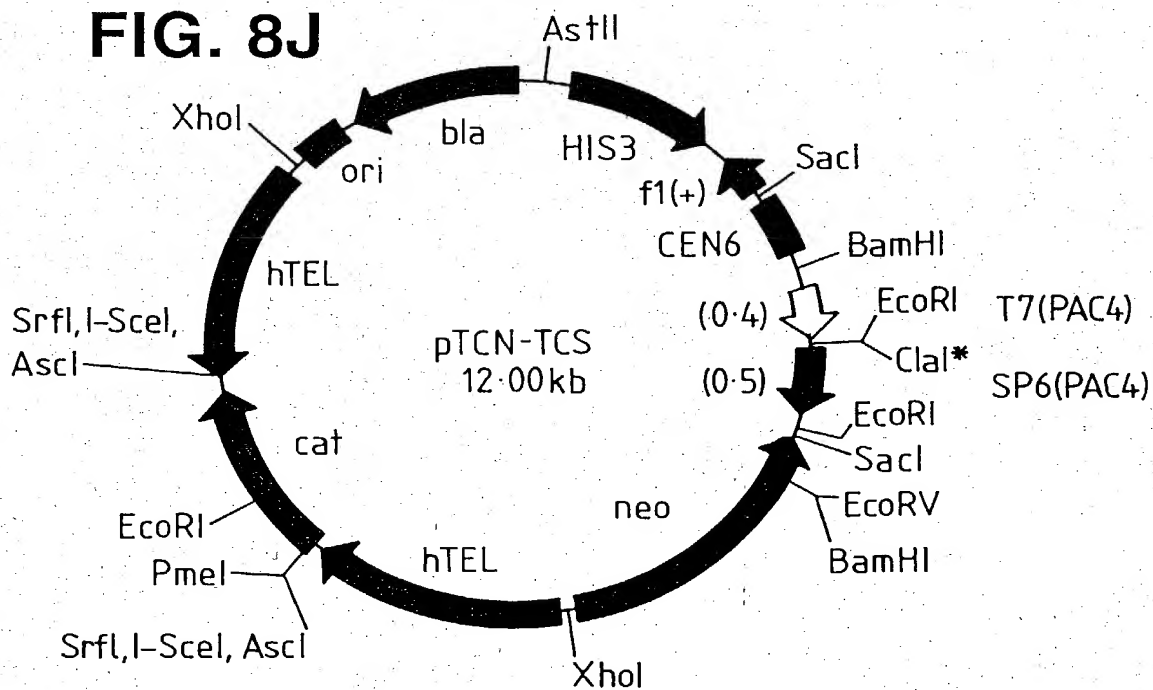


FIG. 8J



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FIG. 9 Circular TAR

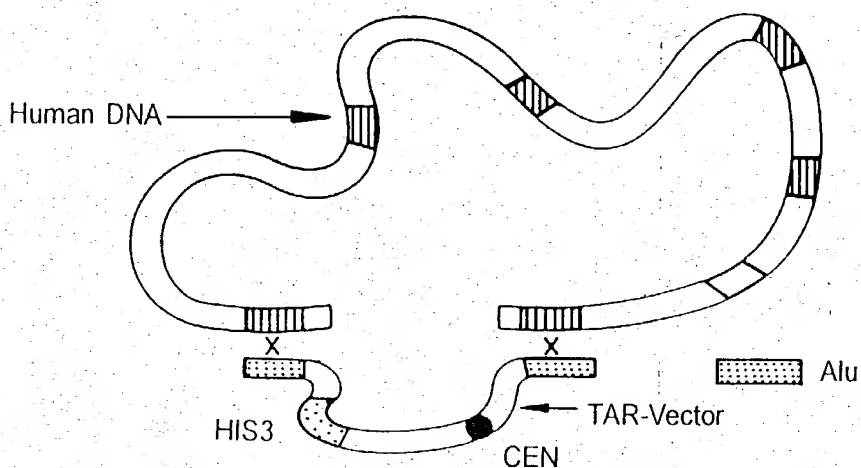
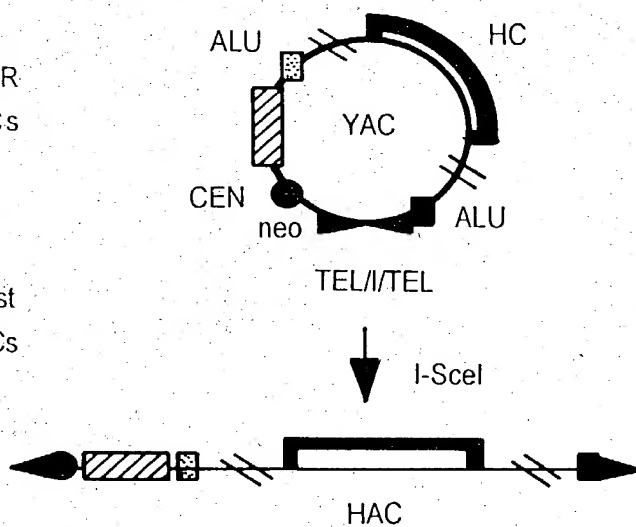


FIG. 10 Shuttle YAC to HAC

1. Circular TAR
to create YACs

2. I-SceI digest
to create HACs



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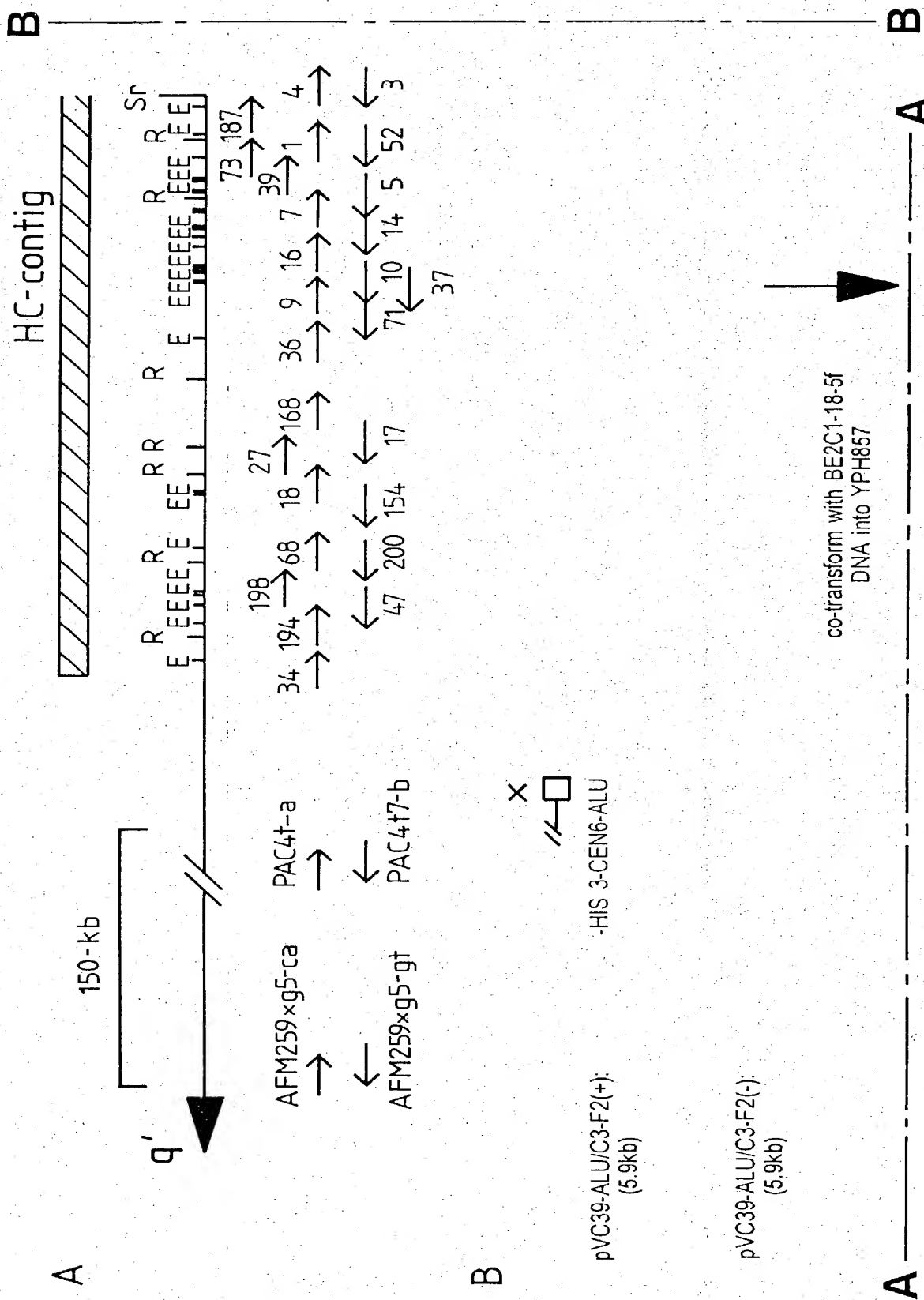


FIG. 11A

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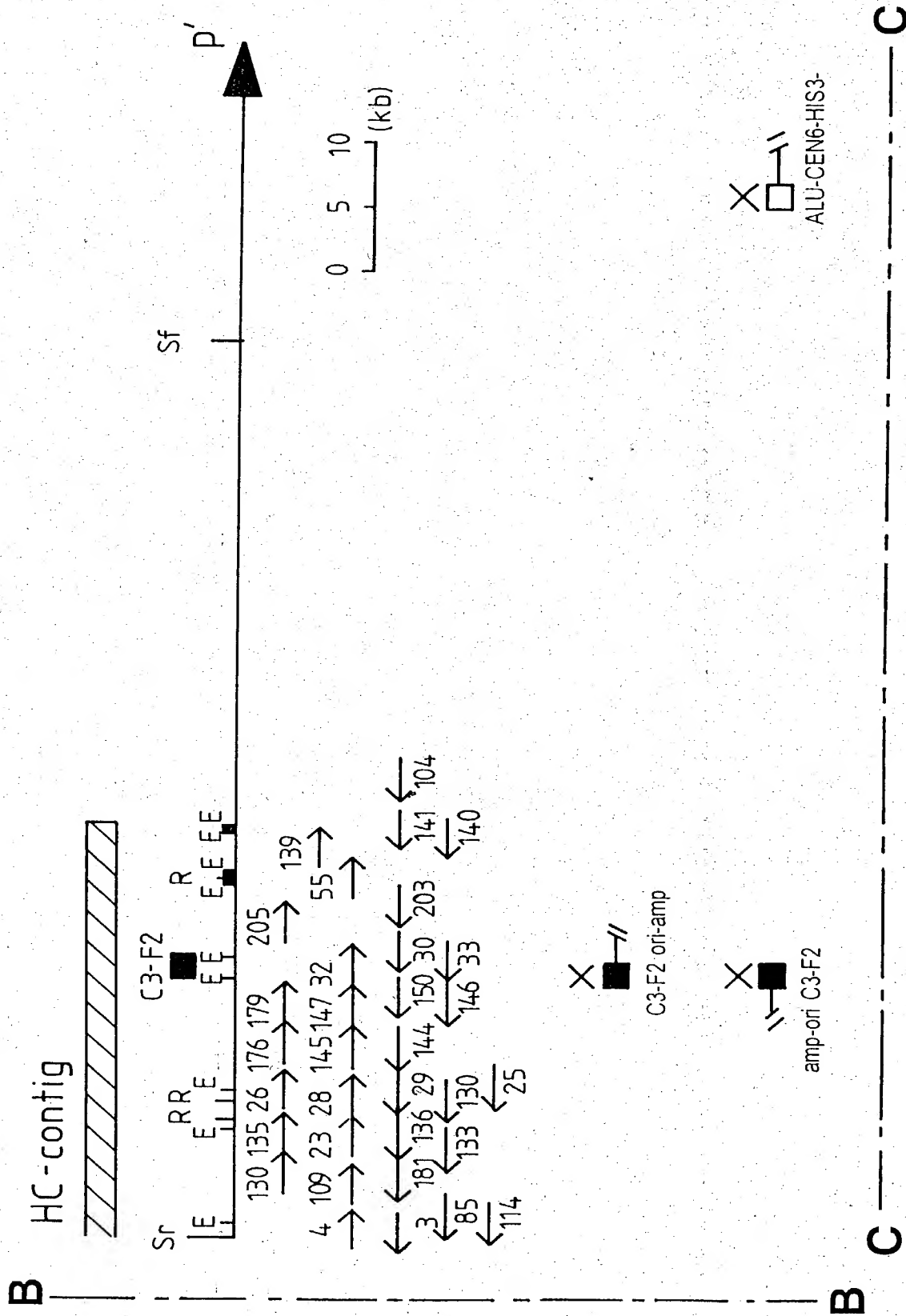
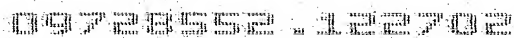


FIG. 11B



A — — — — — **A**

C

YAC 5f-52-E8:
(110kb)

-HIS 3-CEN6-ALU

D

YAC 5f-38-F2:
(80kb)

retrofitted with BRV1

D

BAC/E8-1:
(120kb)

-HIS 3-CEN6-ALU

BAC/F2-14:
(90kb)

FIG 11C

FIG. 11C

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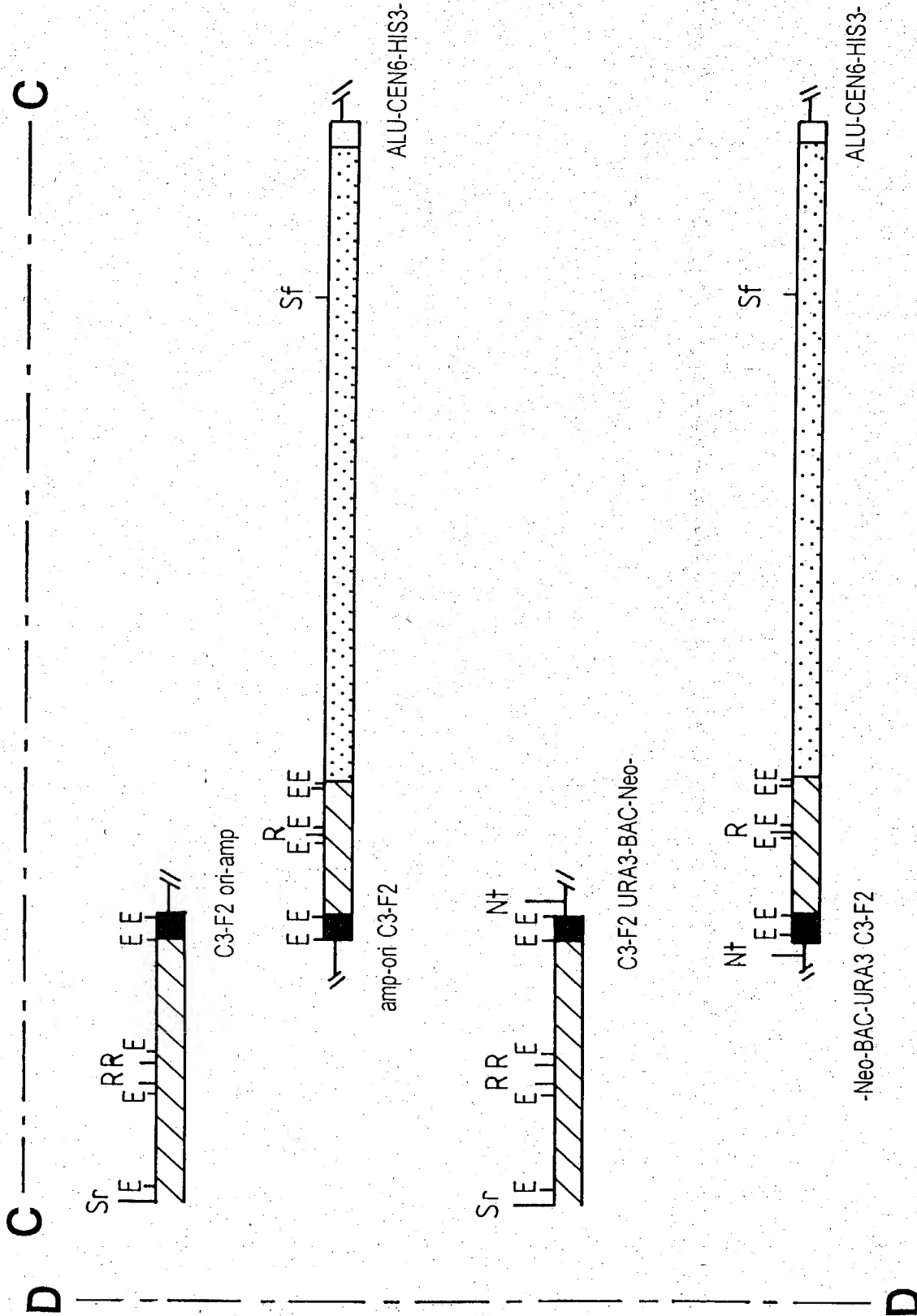
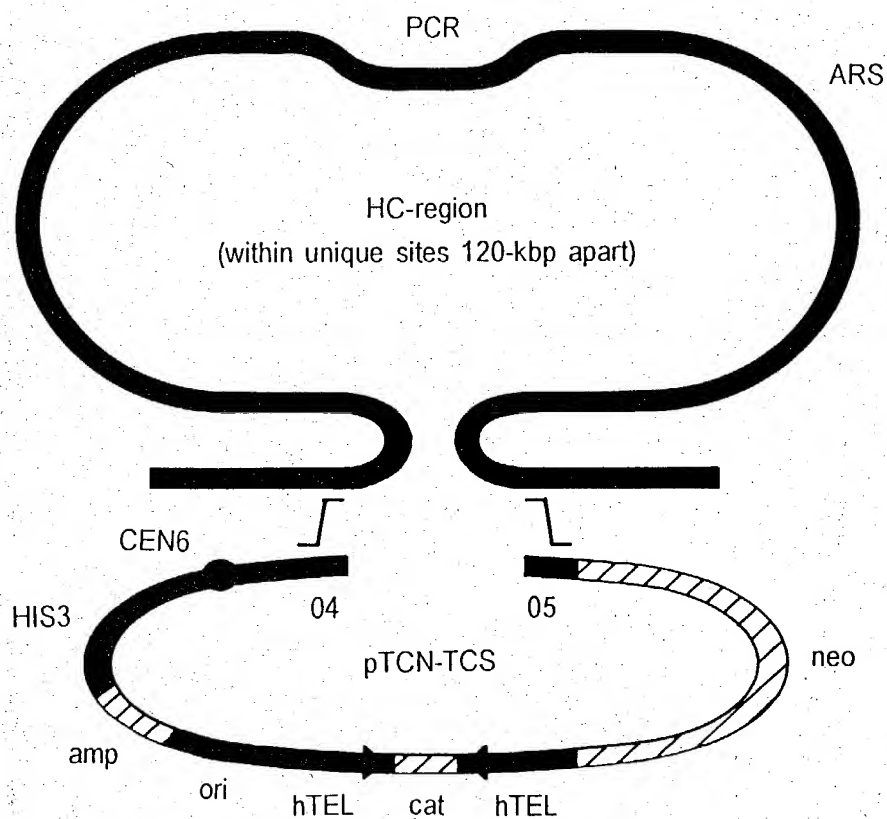


FIG. 11D

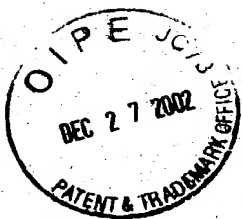
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Specific TAR of HC-region from mar (del) 10



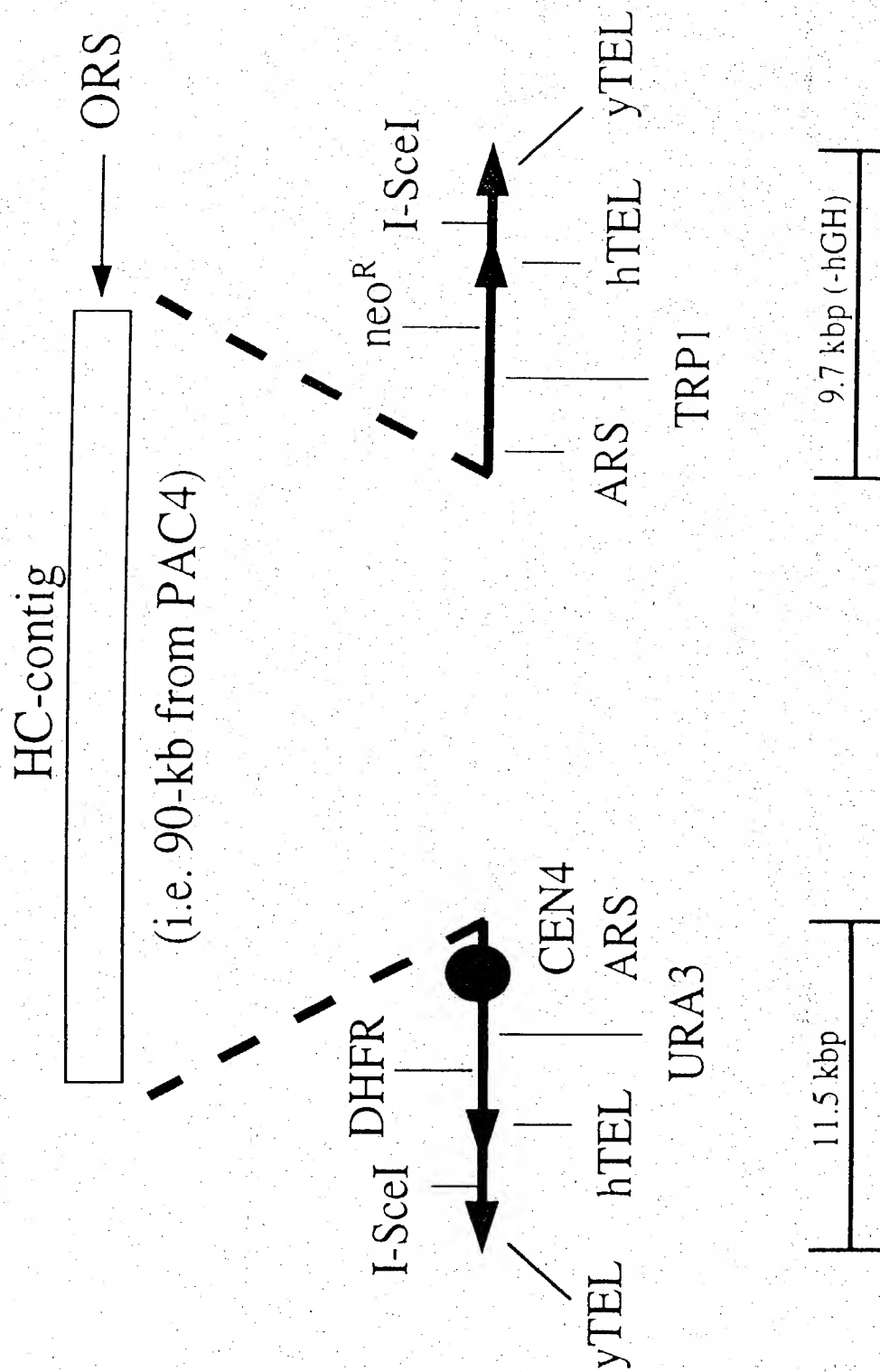
1. Co-Transformation into YPH857
2. Select for HIS⁺ colonies
3. Screen for HC-region by PCR
4. Prepare high-MW DNA
5. Digest with I-SceI to expose hTEs
6. Transfect HT1080 cells
7. Select for G418^R
8. Analyze by PFGE and FISH

FIG. 12



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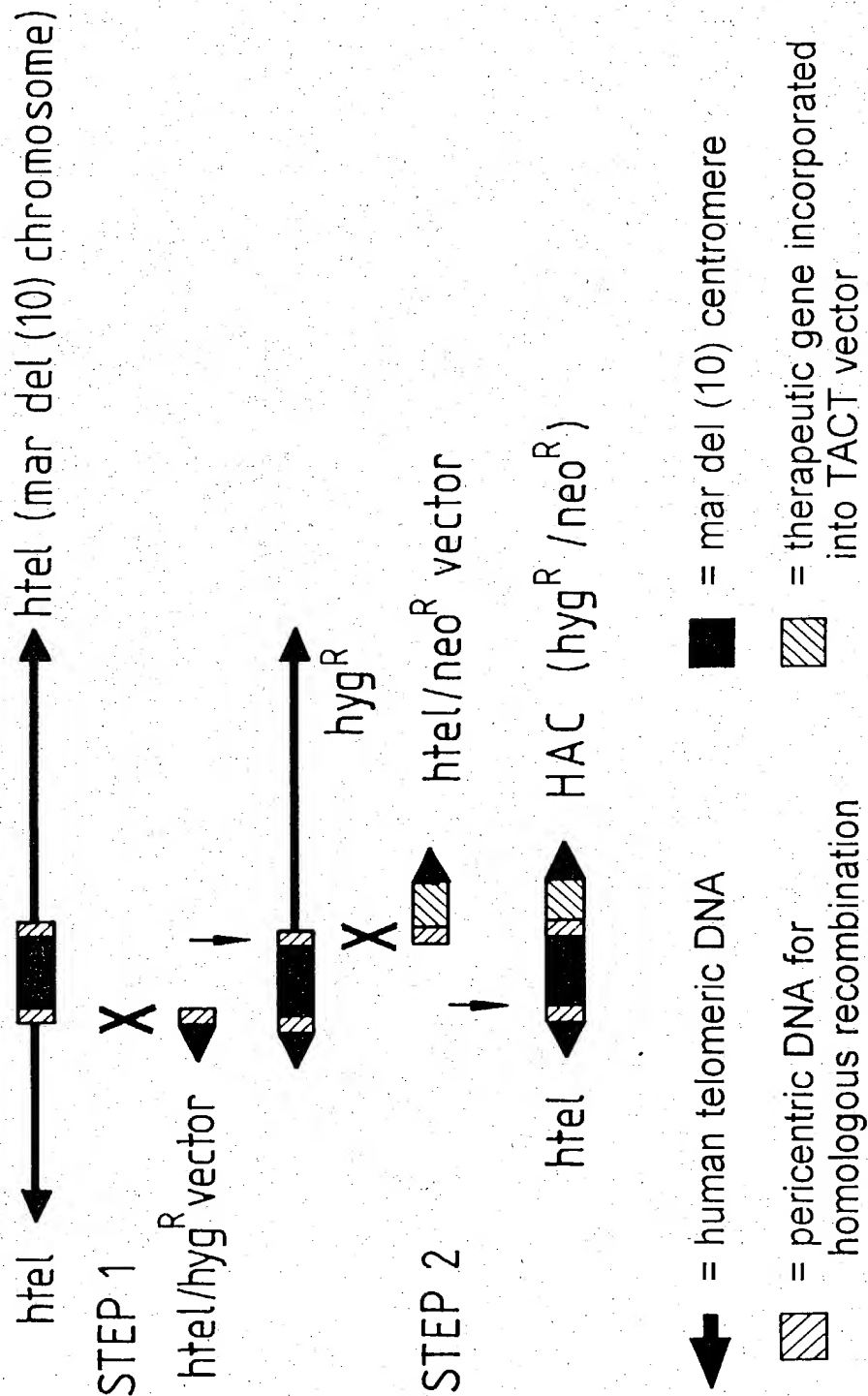
Cloning in Yeast as YAC/HAC

FIG. 13

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FIG. 14

Outline of TACT procedure



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TACT constructs

FIG. 15A

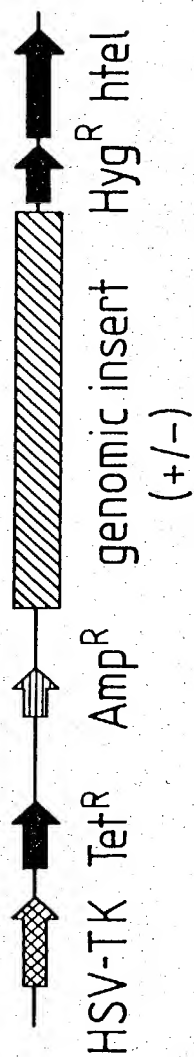
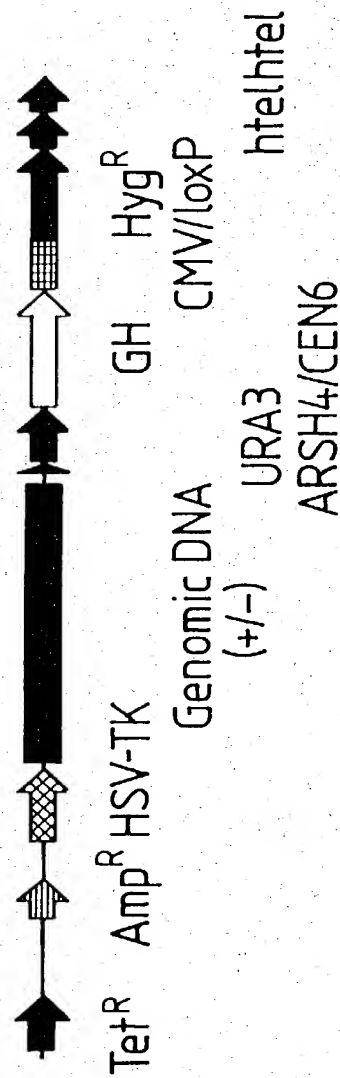


FIG. 15B





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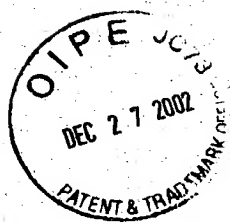
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NC-Contig (80225 bp)

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CTTTTTTTTTTAAAGTTTATAGATGTTATGTTTCCCTTATACCTTAAAGTGGGTGCTTATAGGCAGCAT
ATATCTGGGCTCTTGATGTTATTTAATCTGATAATCTCAACCCTTTTTGTTGGAGTGTTTGGCCATTT
ACATTTAGTGTAATTATAGACATGGTTTGATTTGCTATACCATCTTTTCATTTTATATGTGAGCC
ATCTTTTCATTTCTTTTTTCATCTTTGACCAATTTTCTTAGTACTGAATACCTTTTTTGTATTTTAT
TATATCTATTGGCTTTTTTAGTTATACCTCTTAAATTTTTTTTTCTGTTTTATGAGGATTTATAATAT
ACATCTTTAACTTATCACAGATTACCTTCAATAGTATTTTACCAGCTCAAGTGTAATGTAGAAACCTT
ACAAAGAGTATATTTTCATTTCTGTCTCCTAATTTTTATGCTATTGCTATAATACATTAGGTTTGTGT
TGTTTGTTTTTACCTTATTGCTGTTGGCTGGGTCAGCAACATTTTTCTGTAAAGGCTAGATAGTACA
GGCATACCTTGGAGATACTGTGGGTTTGGTTCCATACCACCACATAATAACAATATGCAAGAAGTGGA
TATCACAATAAAGTGAGTCACACAAGTCTTTTGGCTTCCAGTGCCATATAAAAAGTTTTGCTTATACTAC
ACTGTAGTCTGTTCAAGTGTGCAATAGTGTATGTCTAAAAAACAACATACCTTAATTTTAAATGCTTT
ATTACTAAAAAATGCTAACAAATCATTTGAGCATTGAGTGAGTTGTAATCTTTTTGCTGGTGAAGGCT
TTTTCTTATTGATGACTGCGGGGTCAGGTGCTGAAGCTTAGGGTGGCTGGCAGTTTCTTAAACA
ACAGTGAAGATTGCAATATCAGTTGACTCTTCTTCAAGAAAGATTTCTCTCTAGTGTGATGCTTT
TTGATAGCATTTTATGCACAGTAGAAGTCTTTTGAATAATGGAGTCAATCCTCTCAAAACCCTGCTGTC
TTTAAACAACCTAAGTTAATAATAATTTCTGAATCCATTTGTTGCTATTTCAACAATTTTACAGTGTCTT
CACCAGGAGTAGATTCCATCTCATTTCTGAGATGGAATCTTTGCTCATCCATAAGAAAGAAATTCCTCA
TCTGTTCAAGTTTTATCATGAGATTGCAGCAATACAGTCATGCTTTCAGGCCCTCACTTCACTTTTAATT
CCAGTTCTCTGTTTCTACCATCTGTGGTTCTTCTCCATTTGAAGTCTTGAACCTCTCCAAAGT
CATCCATGAGGCTGGAATCGACTTCTTCCAAATTCCTGTTAATATTTATATTTTGACCTCCCATGAAT
CATGAATGTICTTAATGGCACCTGGAATGGTGAATCCTTCCAAAAGGTTTTCAATTTACTTAGTCCAG
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AGGCTTGAAAGTTGAAATTACTCCTTGATCCATTTTCTGCAAAATAGATGTTGTGTAGCAGGCATGAA
AGCAACATTAAATCTTTTGTACATGTCCATCAGAGCTCTTGGGTGACCAGGTATATTGCCAGTGAGCAG
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CATCTGTAAACTGATGTGCTGTCATCTAAACTTTGTAGTTTTCATTTATAGACACAGGCAGAGTAGAT
GTAGCATAATTCTTAAGGGACTTAGGATTTTTCAGAAATGGTAAATGAACATTGGCATCAATTTAAATCAC
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A ————— A

FIG. 16A(1)



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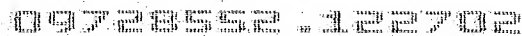
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A

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TACATCAGCATTTGCTACTTCACCTTGACTCTTATGTAATGGAGTGGCATCTTTCCTCGTACCTCATG
AACCAACCTCTGCTAGCTTCCAACCTTTCTCTGTAGTTTCCCTCGCTCTCTCAGCCTTCATAGACTTG
AGGATAGTTAGAGACTTGCTTTGGATTAGATTTTGGCTTCAGGAAATGTTGTGGCTGGTTTGATCTTCT
ATCCAGACCACTAAAACTTTATCCATATCAGCAATAAGGCTGTTTTGCTTTCTTATTTGTGTGTTT
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AGAGGCTAGCTTTCAGACTATCTTGGCTTTTGACATGCCTTCCCTCACTAAGCTTAATCATTTCTAGCT
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AACACTAATAAATGTTGCTGCTTATATGATGTSCTTGTGATGCCCCCAACAATTACAATAGTT
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CATGGCAAAACCCCGTCTCTACTAAAAATACAAAAATGAGCCAGGACTACGCAATGCCTGTAGTCCCAGC
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GCCACTGCACCTCCAGCCTGGGCAACAGAGTGAGACTGTCTCACAAAAAAGGAAAAAGAAAAATA
CACATAAATGAATGTATGTGGCTGTGTACCATATATCTCATGCTCTAGCTTGCCAAACCTTGCTTTA
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TAAATAGCAATGAATATGTGAGTTTATTTGTTGCTGAAAAAGTTTTTGTGTTTTTGAATAATACCTTTT
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CTTCTGGCTTGATAGTTTCTCTGGCTGCCTTCAAGATTTTTCATTTGCTTTAATTTTAGCAGTTTG
ATGTGCTAGGAGTATTTCTTTGTATTTATCCTTTTGGGGCCTCTTAATTTCTTTGATCCTTTTTT
TCTTTTTTTTTTTTTTAAACCATTTTGGGTCTTTTCCCCCATTTTGGGTGAAAAAAGAAAAATAA

B

FIG. 16A(2)



AATCATAGTTTAAAAAACTAATTTTGGAAAAATTTTCAGCTATCATTTTCTTCAAATATTTATCCTACTCT
ATGCTCCCTCCTCCCTTTTCTTCTGTGACTCAAATTACAGGTATATTTAAACCATTTTATTTGTTCCAC
GGCACTGGATGCTCTGCTTTCTTATTTTGTCTTTTCTTTCATTTTGGATAAATTTCTACTGACCTATCTTCA
AGTTCACTGATTTCTTTTCTCAGTCATGCTAGTGTCTCAACGCCCTGTTGAAGAAATCCTTTGTCCTTTA
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TTTTTTTTTTTTTTTTTTTTTTTTTTTTTAGACAGAGTCTCGCTCTGTCAACCCAGGCTGGAGTG
TAGTGGCGGATCTCGGCTCACTGCAACTTCGTCCCTGGGTCAAGTGATTTCTCCTGCCCTCATCCTC
CCGAATAGTTGGAATTACAGGTGCCCAACCCGTGGCTGGCTAAATTTTTGTATTTTTTTTAGTGGAAACA
GGGTTTACCATGTTGGCCAGGCTGGTCTTGAATTCCTGACCTCAGGTGATCCACCTGCCCTCAGCCTCC
CCAATTGCTGAAATTACTGGCATGAGGCACCTGCACCCAGCTCTGCTGACATTTTATCTTTTGTGCA
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TGTGTGTTTGTATTTCTTGATTTGATGCCAAATATTCCTGTAAAAATAAACTTAGATAAGTCATACTT
CTATCCAGAAATAGCACATTTTTTGTGTCAGTCATATATGTGGAGGAGTTGGGCAGTCTATCAGTGGC
TGAAC TAGTTTGGATTTGTTGATGCTATACTTAGAATGCACCCAGACTTCCATTCACTGCAAGAGTGGGC
TGCTGCGCTTTGTGATTCATGTGAGGCTGAATTGTGGAAGGTTTTTCTTAGTGTGTCCTCCATGC
TCAGATTTTCAGCAAGCTTTCATATCTGTGCCACAGAAAGGAATCTGACCCATGCTTTTTTGACCTCCCC
AAGTGATCAACTGTTGCTTGTATAGCTTGTCTATGGAGTAAGAGGTTGTTTTTTTAGTTTCATCCTCC
AGCCTTGGTCTTGGGCCCTGAGCTCCTAGACTCCAGGAGTGGATGGAATCCAGTGATTTCTCAGTAATT
CAGCCCCCTCTCCAGTAGTGGCAGATCTCTGCTTTGTATCAGTGCAAGATCCTGGGCTGAGCTCATTTT
CTGCCCTTCTCGAGTGGCAGACAGCTCTTGCTTTTCAACCTTCTACCAAAGGCAGTGCACTTTTCTTG
GGCTCTCCCCATTGAACCTTATGACTTTACATAAGAGAAGGCTCATGTATCAGAGAAATCTGTGACT
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CAGGTGCCCAACCCACACCTGGCTAATTTTGTATTTTTTAGTAGACACAGGTTTTACCATTTTGGTC
AGGCTTGTCTCAAACCTCCTGACCTCATGATCTGCCCGCCTCAGCCTCCCAAAGTCTGGGATTACAGGC
ATGAGCCACCGCGCCAGGCTCAGCTGTTCTCTTTTTTACCTGCTGGGATGGCTAGTTTTCTGTGTCAAC
TTGACTGGGCCCATGGGATGTCCAGATATGTAATTAACAGTATTTCTGGGTGTTTTCTGTGAGGGTGTCT



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C

TCAGAAGAGATTGCAATTGGAATTGGTGAACCTAAGTAAAGCAGAGGGCCCTGTCTAGTAGGGGTAGGCA
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CAC
GAACCATATTTAATACACCTGCTTTTATGACGATTACCTATCGATTCTGTATTTGCCAAAACCTGAAAA
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GGAGAGGAGGATTGTCATCATTTGGGATTACGTCAATTTAGACCCCTTGAAGCCAGGATTGAGTAAAGCC
ACAGTGAAGCGGACTGGCTCGTATGGAAGCTTTATTTAAGAAGATTAATCTGGTAGTGACATGTGCCAA
AACTGAATAGGTAGAAATGAGATGCAGAGAGCCAGTTAGAACCTAAGTCTGGTGCAGTAATGCAGGAT
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GTGGTTGACAGCATGGCCCTACTGCTCATCATCAGCTATTAACCTTAGGCAAGTTAATGAACCTTTTCTA
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D

FIG. 16A(4)

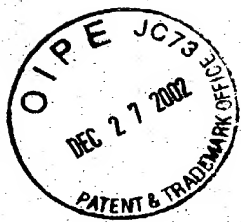


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D
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CATTAAAGTTAGTAAACATCCCCCTCGCTTTTTTTTTTTGAGACAGGCTTTACTCTGTTGCCTAGGC
TGGAGTGCAGTGGTGAATCGTGGCTCACTGCAGTCTCAACATCCTGGGCTCAAGCGATCCTCTCGCTC
AGCCTCCTGAGTAGCTGAGGTGTGCACCAACACACCCGGCTAATTTTTAAATTTTTTTTATTTGTAAGGT
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AATGCTGGGATTACAGGCGTGAGCCACACGCTGGCCAGTAAACCCCATTTACATCATCTTACT
TGTCCCTCCAAAAATCCTGCAAAAGTAGGTAGTCTGTCTTTATTTGTTATTTAGGTGAAGAACTTGAAG
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TTCCACCAACGCTGTTTACATCACATCTGGAGAAAGTGTCTGAGGCACAGATGTTTAGTGGGAGGGA
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TCTGAAACGTCGCAACTTTAAAAAGAGAGATTAAATTTAAACATGATACACGGGGCACAATATGCAG
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CTTTAAAAATACCAAGTAAAGAAAGAAAGGAGGAGAAAGAAAGAAAGGAGGAAAGGAAAGGAA
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TAAACAATTTAAATTATATTTTCTGTATCAAAACTTAGTAGCAGTATTAAATCCCTGGGCTTCTTGACTA
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E

FIG. 16A(5)



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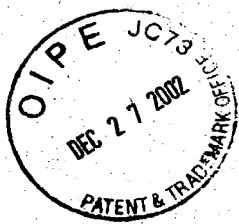
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E

TCTGGTAATGTGGTCTGGGCTGAAGGGCCCTTTCTAAGTTGTAGATAGAAATCCAGGAAACTTGTTAG
AACTGCAGACCTATCAGGGTACCTGCAGGAGGTGAGTCTACTAAGTGAAAAAGCAGAGGGCAGAGGTC
GTGATTAGCAGCTGACCGCCCTGCTTTTCTGTCCCTCATTCGTGGAATAATTGAGTGGAGCTCAATTT
TGAGTGGAGCTCTAAGTAGCTCCACTTGTAGACATTGAGTGGAGCTCTAAGTGTCTTCAGAAATAGCAAA
ACACTAGTTTCTTTTCTTTTCTTTTCTTTTCTTTTGGGAGACAGAGTCTTGGTCTGTCCCCCAGGCTG
GAGTGCAATGGCAGCATCTCCGCTCACTGAACCTCTGCCCTCCCGGTTCAAGGACTCTCCCTGCCCTCAGC
CTCCCGAGTAGCTGGGATTACAGGTGCCCCACCAAGCCAGCTAATTTTCTCTATTTTGTAGTAGAGAT
GAGGTTTCACCGTGTGGCCAGGCTGGTCTCAAACTCTCTGGCCTCAAGTGATCCGCTTGGCCTC
CCAAAGTCCCTGGGATTACAGGTGTGAGCCACCAACCCAGCTGCAAAACCCCTATTTTCTTGAATGGAG
AAACACTTTCCCTTATTATTAGTTTGGGAAGCAAGAGGGGTAATTCATTAAAGTGAAAAATTTCC
AAAATCCAGAAACATCGATAAAGCAGCAGCTTAATTTTAAAGGAAGAAATTTTAAACTATCTCT
TTTGAGCCTCTTTAGGAAGACCTCAGCTCCTTGCCTTGAATGTTGAGAGTGGGAAATCCAGGGAGGTTT
TGGAATGCATGCCCTTATGTCTGCTTTTGTGTTGTAGAGAAATATAATATTTATCTAGGTTTGTCT
GATGGCAGTCAAGCATGAACACAACCCACTGTTTGAGAAAGCTGTAATTTCTGAATTTCTGCAGAGTGCA
CATCTAGGCCAGCAAAATGGCAGTAAGAGTGAGGTGATTAGCTCAGTGTAGGATGAATCCAGAAACC
ATCGGCTCTGACTGAAAGTGAAAGCGGCAGCCGCTGTGGGAAAGCTGGCTGGAGTCTCTCATAAAGC
AGGCATTCTTTTCTCCAGCCCGTCACTGTGTTGTTTGGGCCACGGTAAGCCTCTGGCCTCTAGGC
TGTAACCCCCACCATCCTCTGCTCGCTCCCTCCAGAGTGATTTCTGAAGCACAACCTGGATGTCATT
CCCCCTTCCCTGAACCTCTAGCACCTACAGGAGCTCCATCCCTTGTCGCCACACATACCTCACACGTAGACA
TTCCCTAATGAAGATTGATTGAATTTATTGAACCTCAGTGCCTCCACTCTTCTAGTTGCCCTCTCTGCC
TGCCCTTTGTACATTTATTTATTTATTTATTTATTTATTTATTTATGAGACAGAGTCTTACTGTATCACC
CAGGCTGGAGTTTAGTGGCACCATCTCAGCTCAGTCAACCTCTACCTCCAGACTCAAGCAATCCCTCC
CACCTCAGCCTCCCGAGGAGCTGGGACCATAGGCACGTGCCACTATGCCCGGTTAATTTATTGTAAATTT
TTGTAGAGATGGGTTTTCATCGTGTGCCAGGCTAGTCTTGAACCTCCTGGACTCAGGCGATTGCCCCG
TCTCAGTCTCCCAAAGTGCTGGGATTATAGGCGTGAGCCACCATGCCAGCCGCTAGCACTCATCTTAA
TCGTATATTTACTTATCTGGCTTTCCCAACAGACTGCGGGCTCTTCAAGAGTAAATGCCATGTTTTCAC
CTTTATTTCCCCAGTTTGTGGCACATTTCTAGGCACCTCGCCCATCATGAAATAAACCTCTGGAGCTGTGAT
ATTACAAACGTGAAAGATGACGAGCAGCTCAGCAACTTTTCAAGTGAAGTAAACAAAGGCTTTCATTTCAGCA
TGATTTTATTGACTGCCCTGATCTGGGCTGCTTCTGTCTGTGTTCAAGGAGAGCATAGTCTACAGAA
CCAGAGACCTGGCTACTCTGGAAGTTAGACTTAAGCCCAACCCCGGCTTGAATGGGAAATATTTCCC
TTCATTCTCTGTGTTTAGGGACAGAAAGATGAGTAATGCAGTGATACATGCTGGAAATGTTTATTCCAC

F

FIG. 16A(6)



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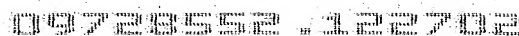
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TACCCGAAGCTGCCTCTCAACTTAACAATCCATGAAGAACAAGATGGTATATAACTTTTTCTAATTT
GTGATGCCTTTGTTTATTTGTTCCGGTTAAAGAGGAGGTGGCATTGAATGTTTGGTTTGGTTTGGTT
TCTTCTTCAATAAGAAGCATCTTAATATATACTAGACTGGACATCTGTCCCATTTTCAAAAATTACAAGT
TTCGATCATTGCTAAATTGTACAGATCCCAATCTGTCTGCTCTGCATACATTTGCATTTATAAAAAGCAG
AAGCAGACTAGCAGTCTTTCTAATGCAATCCCCAATGCAATGCAATGCAATGCAATGCAATGCAATGCAAT
GTTCAIGCATTGCTAAAGGCTTAAAGGATCATTTGATTTTAAATTAATTAATTAATTAATTAATTAATTAAT
TTCCTTTCTTTTAAAGGAAGAACCTTCAGGGCATTTGCTTTAGTTTTTAAATGTTAAATCTCATTTT
TCTTTGAAAATAAGAAGTTAAAGCTGATTACACAAAGCTCTCAAAAGTGCCAGATTTTCAATGTGTTTT
TAAACCATCTAGGAAATGTTTGATTCTAATGAACATTAATGCTGAAATTTGGCTGAAATTTGCTGGC
TGAAAATATTGTTATAACTTCACATGATTCAGTGTGATTTATTTTCTTTTCTTTTCTTTTCTTTGAC
CCGATATAGATGAAGCGAAGAGACAAGGAGCAATCCCATGTGTAATAAAAAGGAGCCTGAATTTGT
TGTGCTGTTTTTGAATTTAAGCTGTTTTCAATTAATTCAGTAAATGGTCAGGACTATAAATGTT
GAACATTTTTACCGTGTGATTTAAATTTAGTTTTTAATGTTTTTTTTTGGGTTTTTTTTTTTGAT
GGTTTACATTTTCCCATGGAAAGCAGCTATGTCATGTCGGCATGATTCATCATGTTAACATCTCGGGT
TATTTTGGTTTGTGTTATGTTTCAAGAAAGCGGAATGCCAAAATAAAGAGTGGTTTGTGATGTCAGTGT
GTCCTTCTTTAAACAAATCAAAGGCTTTTATTTAATCCACTTAATGGGACACTGCAGAAATTTAAAAAAT
GGAAGTCCCATCCACAGAAAGGAGGTAATGATGTAATAAAGTTTAGTGGGGATTAATAGAGTGATC
ATATAATTTATGAGCTAAACCGGAGGCACTTTTTTTTTTGTAGATCGAGTCTCACTGTTGCCFAGGCTGG
AGTGAGTGACGTGATCACAGCTCACTGCAACCTCCGCCCTCCCGGTTCAAGCGATTCTCATGCCCTCAG
CCTCCTGAGTAGCTGGACTATAGGGCCCCACCACCTGCCCCAGCTAAATTTTGTGTTTTTGTAGAGA
TGGGGTTTCAACCATGTTGGCCAGGCTTGTCTCAAACTCCTGACCTCAGTGATCCGCCACCTCGACCT
CCTAAACTGCTGGGATTACAGGCGTAAGCCACCAATGCTGCCCCAGAGACACTTTTGAGAGTGAAGAGG
AAGCTGAGAAATAATCACTGATCTACAACCTGGGACCAATCCAGGGCAAGCCAGATGCCATTACCACTAGC
TAGAAAGCTTGCCAAGGTCTCATTTACCTTGGTATATAGCAAAATCTTCTTTGAATTCCTGGAAATTCGT
GTAAGTCAATTGAGGTAGCTCTGTGCCAAGGAGCAATATGGTAGAATTTCTAATATTTTCAGGCAGTACAAC
ACTTTCCTGCATTTGTAGCAGGTAAAGGAGGTCAGGGCAGAGAACAAACCCTGGGACTCGACAAAG
GGCATAAACGTCTAATGCACCTGATGATGCTGATGTTAATTTGTTATCAGCTAAAGATCTTTTCATAATA
AATAAATCTATCATTTGTAGGAGGACAGAAATCGTGGAAAGCTGGGATTCAGGTTGCCTGTGGCTTT
AATTCCTGGAATCAGAAATATTAGTCAAGGATATCAGTCTATGAAGTAAAGTTTCAATGTTATATGCCAC
AAGATGCAGCTGTCCCTATTTTCACTTCCAGTAWTTCCTTCTGAATTAATACACCTTAAAAATAGCTGCA
GCTTCTCAAACTGTGAGAAATCGTATGCTGCTGCTACTCTTTCTTTTCCCGAAGGCTCTTTTGAG
GTCTTTCAGAACTCAATTCAGCAACAATTAGGGGTCTAAGGTATACAGACGCTGTGCAAGAT

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FIG. 16A(7)

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GCTCCTGAGACACAAAGAGGAGGTCAAGCCCCCTGCCTTCAGGCACCTCTCTATAATATAGGAGGAGAAA
GAGAAAGAAACACCAATACACATAGGTAGTGCCCATTAAGAGGGTGCATACATTAAGGCCAGGTGGTAGG
TGTAAGAAGATTTGTAACATGAGAAATTTCTGCATGTTTGAAATATCTTATAATTTTAAATAATTAAAA
TGGGAGATACATATATATGATTTATGTATGTATATATGTATGTATGTATGTATGTATGTATGTATGTATGTAT
TATATACATAAATATGTATATATGTGTATATAGACATAAATATGTATATATGTGTATATATACATAAAT
ATGTATATATGTATATAGACATAAATATGTATATATGTGTATAGACATAAATATGTATATGTATATATGT
TATATAGACATAAATATGTATATGTATATAGACATAAATATGTATATATGTGTATATGTGTATATAGACATAAAT
ATGTATATGTGTATATAGACATAAATATGTATATATGTGTATATAGACATAAATATGTATATGTATATATGT
TATATAGACATAAATATGTATATATGTGTATATAGACATAAATATGTATATATGTGTATATGTGTATATAGACATAA
ATATGTATATATGTGTATATAGACATAAATATGTATATATGTGTATATAGACATAAATATGTATATATGTATATATGT
TGTATATAGACATAGATATGTATATATGTGTGTATATAGACATAAATATGTATATATGTGTGTACATAT
ACACACATATATACATACATAAATCATTTCTGCATTTATACCATTCACTTTGTAAACCATCTTCCCTAAAAA
CTGTCTCATAAAGAGTCTTCTTTTCCCTGTACCTATGCAATGGTAAGTAGCAAAACACACATTTCTTTTG
GGTCCCCATAACATTCCTGTAGTTTGCCCTTAACAGTCTTTGATGTGAAATTTACTGTTTCTGTCTTA
ACCTTGCTGTCTCGGTACATGGAGTTTGGCTCCTGGCTCCTAGTCTGCATCTTCACCCCATCCCTT
GCCCCAAAGAACTGTTATGTGACCACTGCTCATCTTTTCTGCTGTCACAACCTCCAGTCCAAGCCACAA
ACCTCTCTCTCCTGGATCCTGCGGGGAGTTCCTTTCTCTCCCTGCATGAGTCTATTCTCCGCACAACTG
GCAGAGGTAAGTGAGACTGCGGAAGAGGCAAGTTTGCAAGTCCAGAGGAAATGAAGACTCTGCTTGTGC
ACATGCTGGGTTTGACGGGTGCTGGATATCCGATGGATGGCCCTTAAGGTGAGCTCAAGGCTTAAGGGA
GAGATAGGGCTGATGATCTGAGATTCATCAGTGTGTTGGCTGATGTTTAAACCCAGGGGACAGGATAAG
AAGGTTATTCAGGGGAGCGTAGATAAAGAAGCTAAATGGCTTCTGGTCTTAGTCATTCAAATCG
GACCTCTGAGCGAGGAGAAAGCCAGAAAGAGTAGATTCTCTGGACTCACGGGATAAAGACTTTCAAA
AAGTGGGGCTGGCCAGTGCTGCTGAAGGAAGTAGCAGGACCGGAACAGAGGGTAATCGTTGGACCTG
GAGAACTTGAATTTGAATTTAAGGTGGTAACCTTAAAAAAGAGCAATTTTAGATACCTTTTGAAAT
ATTTGCAAGATTTGTTGGTATATGTGTTATTCAGGCAAGGGACCAGAAAAAGTAAAAAATACTTACT
GAACAGTTACTGCATGCCCTGGCACTGTAAACACCTGTTTAAATTTCTCAGGCAACCTATAGAGTAGGTG
TCATCATCCCCATCTTACAGATGAGGATATGAGGTGCAGCTAGATTAAAGCAGTTTGCCTCAGGTTACAC
CAACTGGTTAACGTAGAGCTAGGATTTGAACCCGGATGGCTGATCCCAGAGCTCATGCTTTAAATCGC
TAGACTGGTGCTCACAGAAGACTGGGACCGAAAAAATTAATAAAAAAATAAGGAGCCCCCTGGGCTA
GCAAAATTAGAGTTGTTACAGACAGATGTGAAAAAGGAAGCAAGGCAGAGGGAAGTCACTGTACAGAAG
AAGAGACCCCATGACAGCAGAGACAGTGAGCTGGTAAAGTGGCTGGCGATCTAGCCCCCTGAAAAATACCT

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FIG. 16A(8)

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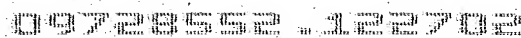
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H
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CATGGTGACAGGCACCTGTAATCCCAGCTGTTCAAGTTGGCTGAGTCAGGAGAAATAGCCTGGATCCGGGA
AGTGGAGGTTGTAGTAAGCCAAAGATTGCGCCACTGCATGCCAGCCTGGCGGACAGAGCAAGACTTTTCT
TAAACAAACAAACAAAAPGAAAAAGAAAGGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAGAAAG
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AAAGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAG
TTCTGAGAACTCACATCCCTTTTGATGAACACAAATGCTTCACACTCTCAATGTTATTGGTAATCCAA
GTTATCAATATACCTAAATCACTTAGTACTGAATCTGGCATATAGTAATCACCTAATGAAGAGATAAGA
GTCATGGAGTATCTGAAGCAATTAGAATCAATAGACTCAATATACACATGGCAACAAAGTTGGATCTT
AAAAACCGACCTGAGTGAAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAGGAAAG
ATATGCTTACACAAATTTGTAAGAACACATACAAATAGATACATGTATATTAAACATACCTCGAACGGTTA
CCCTATGGGTGGTGGCTGGAGTGGGGTAAAGTCCGTAAGCTGTAATGGAACCTAAACAAATACATGAA.
ACGAGTAGGAATCAGAGGAGTAACAATAAAATGTGCCATGAAGGAGGTAAATTAATCAACTC
ACTGCATCTGAGGTTAAAAATAGAAAGATGATAATTGTTATTTCTTACTCTTAGGTCTTCCACTTGC
ACTCAGCTTTACAAATGTTGGACTATCCTTCAGATGGCACCTCCTTGCACTTGCTCAGGCAGGAGAGCT
TTTTCTCCAGCTTCTAGGTGATTTAATATATCAGGGAATAAGTATAAAAAAGGCACGGTCTCCCT
GGTAGCCTTCTGGAATTCAGAGCTAAATTGCAAAGTCAGTTTACACATGTGATTTTATGAAA
TTAGGGCAAGGTATAAACTGGCACAGAAAAATGTGATTTATTATGGTTACTATCCCTTACAAGCG
GAGTGTGAGCTGCTCTTTTGTCCACTGATTTAAGGCAAGATGAAGTGGCTATGATCACGTC
TTCAAAGCACACTCTGGCCCCCTCGGTGAGGCGCCCTGCACATTCGCCAGCTGCGTCCGGTGGTG
ACACAGTGCATAATTGTGGCCCTTCCTGGTGCAAACTGTCTCACTTAGCTCCGTCTTGCTGGCACAGC
AGAAAGGAAGAAATCGAAAAATGTTGGAATTCAAAGGTAACAAGGAGCTGGAACAACTACTGGCCGA
GTCTGAGAGTTTCAGCGGAGACTGGTGACGCTTGTGTTTTTCCACTGACAGCTGAAAAATGAGCCGAGC
TTCAGTGAAGCTTGTCTCCCTCCCTCAAGGTTACCCACAATTCCTCAGTTCTCTCAGGAAAGCCAAA
AAATGAATTTGAGGTTTAGGATTGTGTTCTTTATCTATACAGGATTGATAATATGTTCTCTCCACC
AGATGTTCTGCTGTAACAATACTCACTTCTGACACTACTGCATATGCAGGAGTGTCACTACCAAGGT
AAACACAGAATTGGCTGCCCAATTCCAAATCCCTGAAGTGAAGGAAATCAGAATTTATAATAGGGG
ATTCAACAGAGCTGGCTACGGATGTGCCAGTGGTCAGATACTTTGCTCATCATACGAGGTGCTGCTGC
TCTAGCAACTGCTCACTGCTTCATTTCTGCTTGGCTTAAATACTGCTTTTCTCAGCTCAATTGGC
TTTCTCCCTCTGGCAGTCACGTTTCTTTGGTCAACAGCAATGATTTCTTAGAATCACCTGGTACT
CAAAGGAGCTACAAGACATTGGGCATCCACTTCCACTCTCTTGGAAAAACAATTTTATGGAAGCCAAAG

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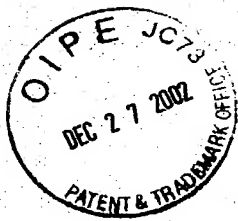
FIG. 16A(9)



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[illegible]

FIG. 16A(11)



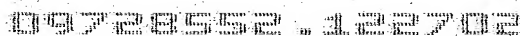
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K

CAAATAAGGAATGATTAATAGTTCACAAATCAATGGTCAGTTAGCCGAGGGAAGATTAGCATAGTTAA
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AACTGGGACACAGGCACAAAAAATAAGAGAACTGGACATGAATAACGCAAGGGATAAGACTAATAC
ACAAAACACCCCAATAAATAGCCAGCATTTGCTGAGCTCTTACTGTGAGCCTGTTCTAAGCACCTTAC
ATATATTAACTCATTTCACTCAAGGAACCATCTGAGGACGGCACTGTTATCATCTCCATTTTACAGA
TAAGGAATAGACCCAGAGAGGCTGAGCAACTGGCCCTATTCCACAGCTACTATGGTGGAGATGAGATTT
AAATCTAATCATTTGGCTCCAGAGCCCATGCACCCCAATGGCTGCATAAGTGAATGCAATCGCTATCAAC
GTTGCCAAAAGTGGGCCACAGCTCGGATCTGCGTTTTCCAGTAGCCAAAAGCAGAGAGTGTGATCAGACC
TCACTTTAATAAGCAAGTCTCAAGCCAGAGAGAGGTGTTATCAGGACGCAACACAGGCTGCTAGTCGAAA
TCCCACCTTCTCTGAGTGGTCCATACAGTTTTACTCTACTTGTCTTACAGAAATGAAAATAGCTGGAGT
TCAGGTGCGCTTCAATGCCCTGTGTGAGGATTTGGGCTTTTCAAGTTTTATTTTTTGTGTTTTTA
ATAGACTGTACTTTTTAGAAAATTTTTAGATTTACAGAAAAGATTGAGAGGATAGTACAGAGAGTTCCCCG
TATACCTCACACCCAGTTTCTGCAATTTATTAACCTCTTACATTCATGCGGTACATTTGTTACAATTAAT
GAGCCAGGCGCGCGGCACAGTGGTTTCAAGGCCCTAATCCAGCACTTTGGGAGGCAGAGGCAAGCG
AATCACTTGAGGTCAGGAGTTCGAGACTAGCCTGACCAACATGTTAAACCTTTCTGTACTAAAATAC
AAAAAATTAGCCAGGCATGGTGGTGGCTGTATCCAGATACTCAGGAGGCTGAGGCACAAAGAT
TGCTTGAACAGGAGGCGGAGGTTGCAGTAAGCCGAGATCGTGCCACTGCCTCCAGCCTGGGCAACA
GAGCGAGACTCCATCTCAAAAAAATAAAAAAAGAGGAAAGGAAAGGAAATTAATGAGCCA
ATATTGAGACATTATTATTACTAAAGTCCATGCTTATGCAGATTTTCTTAGTTTTTACCTGTGTCAT
TTTTTCAGTTCAGGAATGCATTCAGGATGCCATACCACTTTAGTTCATATCTGCTTAGGCTCCTCT
TGGCTAGACTGAGTTTTTAATCTACTTTCTGCAGAGCCTGAGAACTTTAGCATAATTTCTTGAAATTAC
AGCTCAATATTTCAAGCACTTATACAAACAGCCTAATGTTACGTTGGCCCATACAGTGTTCAGGT
AATAAACTTCTTTGTTTCTGTGCGGATTGAAAGAACTGCTGCTTAGCCTCCTGCCAGATGATGAACG
GGTACACACAGGACATTTTCCAGGTAAAGCATAATTTCCGTGCGACTTCTTAAGCTGCAGCCTTATATGCA
ATAATTGTCCATTTACAGACTTATGTTTCGAAATTTCAAGGCACCTCTGTTTCACTAACCATATCTTCAAC
TTTGATAAGTACTGCTTTAATCACTCAGAAAAATTTAACTTGACTAATTTTTTTTCAACCATCAGTTTTTT
TTCGTGTGACTCTTCTCCTTTTCTGTTTGGCCAGAAACATGCTCAGGATTTCTCTCAGGCTTTAAAAA
ATGAAAAAATGTTTCTGCAATCTAGTTACTCCTTGTATTCTGTTTCTGTTTATCGCTGGAATTTCTTG
AAAGCTTGGTGTATTAGTCTTTTTTTCATGCTGCTGATAAAGATATACCTGAGACTGGATAATTTATAAA
GAAAAAGAGGTTTAAATGGACTCACAGTTCCACGTGGCTGAGGAAGCCTCACAAATCATGTTGGAAGGCAA
AAGGCATGTCTTACATGGCAGCAGACAGAGAGAAATGAGAAACCAAGGGATTTCCCTTTATAAAAACCATC

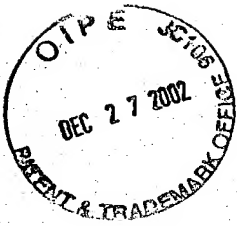
FIG. 16A(12)



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AGATCTTGTGAGACTTATTCACTACCAACAACAATATGGGTAACCGCCCCCATGATTCAATTATCTCCACCGGGCCCTCCCAACAACACGTTGGAATATATGGAGCTACAATTCAGATGACATTTGGGTGGG
GACATGGCCAAACCATATCACCTGGCTATAGCATTATTTCCATTTCTTCCCCATCCTTTTATTCTCTCA
AACCGGTACAACAGACCTCTTTTCTTCTACCTGAAACTGCTCTTTTGAGGGTAGCTGATAAG
TCCAAAATACTGTCAACCTTTTCTCAATTCGGTTCCTTCTTATGCTTTGGAGCAATTGACTGTGTTGGT
TGCCCCCTCCTTTAAAGTGTCTCTCACTTGGTTTTTATGACTAATGATCATGATTTTCTTTTCCCTCTC
TAAACATTCGGCTATCTTTTAGCTTCCCTTCCCTCCCATCCCTAAATGTCTTGTTTCCCAAGAAT
CTGCCCTACCTCTTTGACTTCTCTATGCCCTGTCAATCACTCATGGTCTTTATTACATTTATGCAATCT
GTGTCAATAACTCTGGTCTTTCTCTTAAGTTCAGTCTCCCATTTTCAAATGTCCCCAGACATTTCCAA
TTGAGTATCTCTCCAATGTATTTAACTGCTAAATATCTAACACATAATCTTTCCCATCAAAATCGTTTC
CTCTTAAGCTTTTCTTATTCCCTATTAGTACTCCTGCACTTCTCCAGGAGCCAGACTTTAAAAACCTTG
AATTTCTCACCATAACTCTCTTTTGTCTCCATAATCAATTAGTAGCAAGTGTATCAATGATTACTT
GACAAATCTTTTCTATTTCCCTCCCTGCTATGATCATTCATCTAGCAAGAAGAGTTGGCCCTTTTGTA
TCTGTGGTTTCTGCATCCCTGGATTCAACCAACTGTAGATGGAAATATTTGAAGAAAAAAGCGTCTAT
ACTGAGTATGAAAAAATTTATTTCTTGTCTATTATTTCCCTAAACAATACAGTATAACAACACAGCAATT
TACACTGTAGCGTATAGATCTTATAATCTAGAAATGATTTCAAGTACACCATTATATATAAGGGACTTG
AGCATCTGTGAAGTTTGGTATTGTGGGCATACTGGGACCAATCCCCCATGGATACAGAGGGACAAC
TATATTTACTCAGTGCTTACTAAATACCAGTTGGCCAAATGTGTTTTTCTTTTTCTGTTTCTGTTCTTT
AGTTTGGCCCTTGCCAAATTAATCAATAGTGTGTCCTCAATGCCAGGTGTACCTTCAGAAATTTCTATTCT
AATTTTGTCTATCTCCAAGCTTAAAAATATTATATGGCCAGGCGCAGTGGCTCACACTTGTAATCCCAG
CATTTTGGGAGGCCAAGGGGGGTGTATCACTTGAGGTCAAGGTTCCAGACCAGCCTGGCCAACATGG
CGAAACCTGTCTCTACAAAAAAGTATAAAGTTAACCAAGGTGCTGGAGCATTTGCCGTGGTCCCCAGC
TACTCACGAGGCTGAGGCAAGAGAAATCGCTTTAATCTGGAGGTGGAGTTTGCAGTGAGCCPAGATCTC
TCCACTGCATCCAGCCTGGGTGACACAGCAAGACTCTATCTCAAAACAACAATAAACAACAACAAACGAA
AAACATTTAATGGCTGCACCTTGCTGTGAAAAAATGCATTTCTTGGCCAGATGTGGTGGCTCAACCCCTG
TAATCCCAACACTTTGGGAAGCTAAGGCCAGGAGTTCGAGACGAGCTGGGATATATAGGAAGACACAAT
CTCTACAAAAAATAATCCACAAAATTAGTCAGGCTTAGTGTTCATGCCTGTAGTCCCAGGTACTCAGGA
GGCTGAGGCAGGATTCCTCAAGCCCAGGAGTTCAAGGCTTCCGTGAGCTATGATGGCACAACTGCACCTC
CATCTTGGGTGACAGAGCAAGGTCCATCTCTGGAGAAAAAATAAGAGGCATTTCTTAGGAGAGT
TCTTCTCTGTAGAGTCCTAAGGGTTCCATGGAACCTCTTAAAGCATCAGAGTATGTGAGTGCAATGGG
AGGAAGCATTTAGCCAGAGCAGTTGTGCTCCCATTGATATTAATTTTAAAAACAAGCTATAAAAAA
AAAGTTGAAAACTACTACGTTAGCATCAGCCTGACATTTAATGGCCTCGTAAATCAAAACCTTAATTGAC

FIG. 16A(13)



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M
TTTTAGCCAGTTATGCTACTAGCCAACTACAGACAACACACACTTTTAAACCAAATTAGACTAATAGTTG
TCATCAGTGGAAATCAAGTTTGCCATTCTTCCATGCCCTTGGCTCACACCAATTACCTTTTCTGGAATGTC
CTGTACTCATCTTCTGTGTTGAACCTATACCCAACTTTAAACACCTAGCTCAAAGTTCAACACTTCC
ATTCCATTTCAAAAAGAGCTTTCCTCTTCCCTTAAAGTTTAAAGAACTCATTTTCATGAATCTTTTGGCA
TTTATTGCACACATGCTTGTGTTTATTTGTGTTTCATGCCCTCATATGCCCCCAAGGTGTTTATAGAC
TCCTTAAACGGCAAAATGATGCTCTAAACACCTTCTATCTTTCATAGTGTCTTAGTCTGTTTGTGTTG
CTATAAAGGAATACCTGAGGCTGGGAATTTATTTAAAGAGAGTTTATTTGGCTCACAGTTCTGCGAG
CTATATAAGAACATAGTGTGAGCATCTGCTTCAAGTGGGCTTCAGGAAGTTTCCACCCATGGTAGA
AGGCAAGGGGAGCAGGCATCACATATCAAGAGAGGAGGAAAGAAAGGAAAGGAGGAGGTGCCA
TTCTCTTTCAACAATCAGTTCTTGTGGAACTAATGGGACAAGAGGCTGGGCACGGTGGCTCATGCCCTG
TAATCCAGCCCTTTGGGAGACCAAGTGGTGGATCACCAAGAGTCAGAAAGCTGAGACCAGCCTGGC
CAATGTGGTGAACCTCCGTCTCTACTAAAGATACATAAATTAGATCTAGCTGGGCTGGTGGCTGTAC
CTGTAGTCCAGATACTCAGGAGGCTGAGGTAGGATAATCACTTGAACCCGGAAGACAGAGGTTGCAGT
GAGCTTGTGCCACTGCCAGCCGGGCAACAGAGTGAGCGGTCTCAAAAATTTTAAACACTTTA
AAATAATAGAGCAAGAAAGCAACCAAGTTATTAGGAGGATCCACCCCAATGACTCAAATACCTCCC
ACCAAGCCTCACTTCCAACACTGGGATCAATTTCCGTATGAGATTTGGAGGACAAATATCCAAACT
ATATCACATAGTAATGAACATAGTACCTTATCTATAGAAAGCAATGGCTAGACAACCTGTTGAATGGCTA
ACCAAATCTGCTTTCCTATGGTCTCGCTCTAGAGGGGTCAGTATGAGTTTCTGTCAAAAGGAGAAAAA
AAATGTATAGTCAGTTTGTGTGTGTGTTTATGTAAGAGATCAAGAGAAAGAAACAAAGAGAA
ATCATGAAAGGAGGGGAATATAAGAAATATAACATAGAAAAAGCAATATCTTGTATCAGTAAT
ACCAAGGGGTAGAAATGGTAAGTAATAATCTTCTTCACTTGTCTGTAGTTCACTTTTGGCACCT
TTATTTTGTATGAATTCACATCGAAGACATTAACCTCATTAAAGGCTTCCAATATTTTGGAGATAAGAAAG
GCTGCTATGCTCTTTATAGATGGAAAACTTGGGTCAATTAATAACTCAAAACAAGGACATAACAAAGAAAT
GGAGCATAAACTGCCAGGTCCTGACTGTAGATTTGGATTTCCAGTTGGTGTCTTGTACCCCTTTGTIAC
TCTTCTAAAGTTATGATCTTTTCTGTGCATAGGAAATTCATAGTGATTTCCCATCACCCCTTGGGATT
ATCATAGCTCCTTTAAGGTCCTCTATGCACTCAATAACATCAACAGTAAGTGTCTTCGAGCACTTA
CTGAGTGATATCATTTGTGTTCTACGCAGCACCCACAGATCTCAACGAAGAACCTAGCTGAAGCCTGTA
GAATGAATAGGTAAGTACTGCCATGCCAATCTGGAGTACTCAAGCGATGCAATGATTCCTTTAATTTGT
ACTTTTGCAGGCTTGTGAGTTTGTCTCATGGAGAGTGGCTACTGCATCCATGTTATCTATGTAATG
TTGGACTGCGAAGCATCACTTGACTTTTCCAAAGCAGAAATTACAGCTGATGACAAGCTGCTGCTGAGA
AAATGGATATTTTCTGAATTCAGTTCTACGTGGAAACAGCTGACTAGTTTCCATTGCTGTAAGATGGC
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N

FIG. 16A(14)

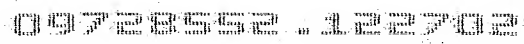
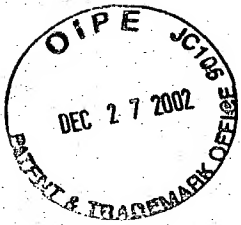


FIG. 16A(15)



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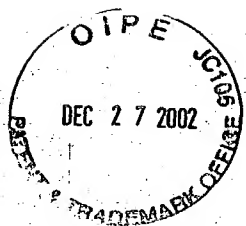
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O

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FIG. 16A(16)



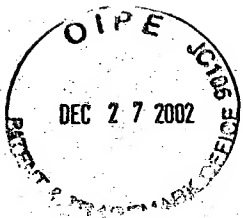
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CCTTAGATCTGTGATATTGAAATAATAAAGCCTCTCCATTGGCCCTTTAAAGGTTTGTGGTAAACC
ACACCATTAACATTACAGTTCCCTTATTATGAGGCTGATTGCACTTATTTCATATTCTCACTGTT
TCTCCGATGAGGATTTACATAAATAGTGTGAGGCTAAAGACTTCAAGCAGATCTTTACTATTTT
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FIG. 16A(17)



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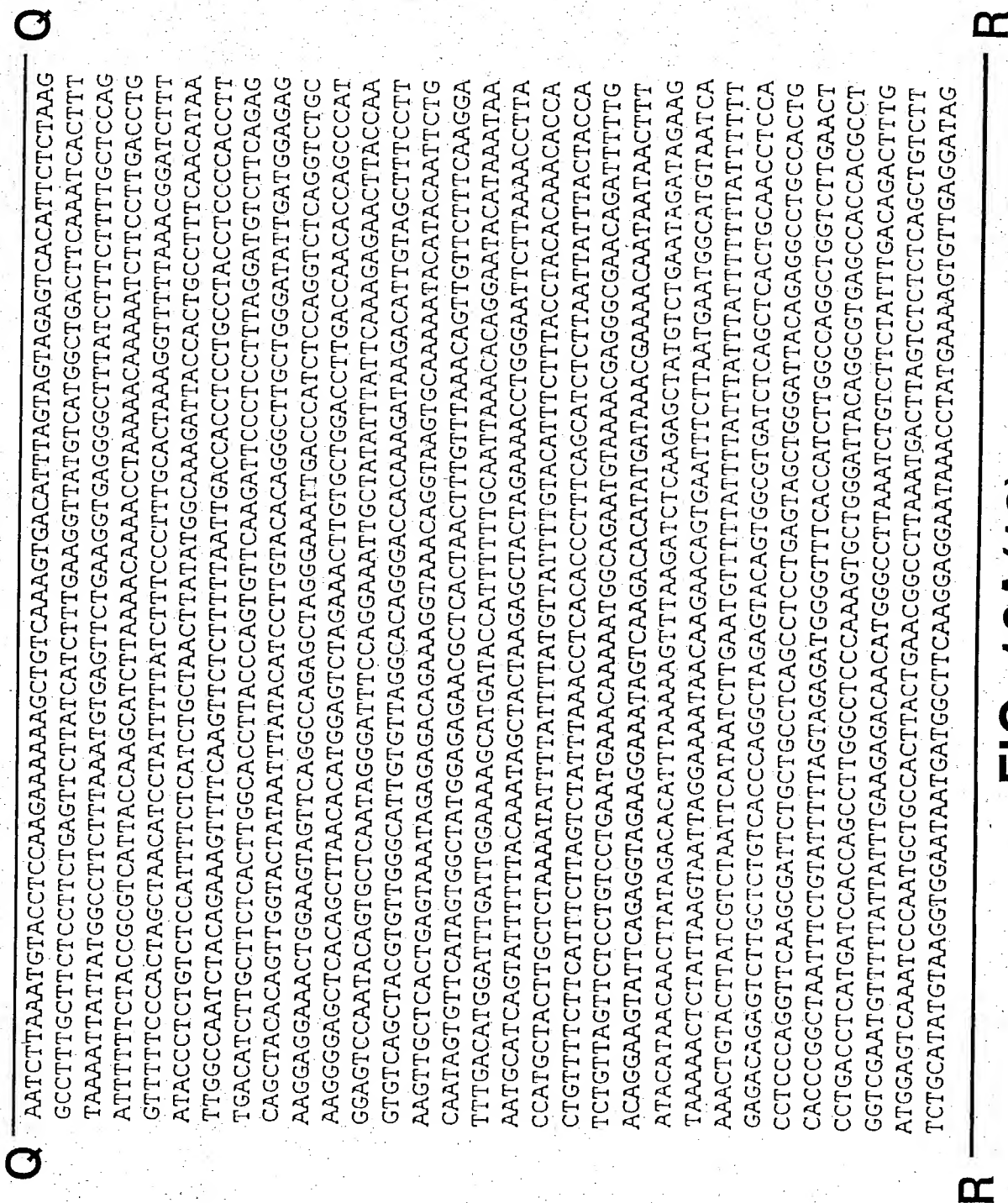
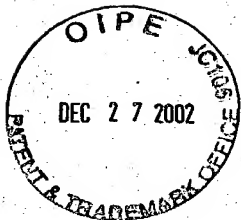


FIG. 16A(18)



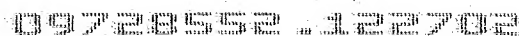
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R
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FIG. 16A(19)



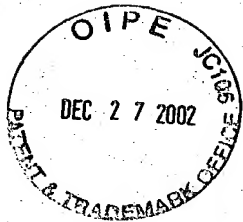
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FIG. 16A(20)

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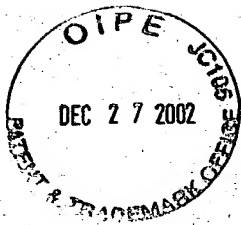
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FIG. 16A(21)

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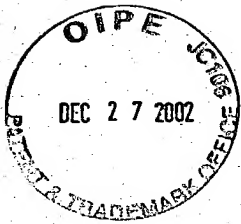
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FIG. 16A(22)



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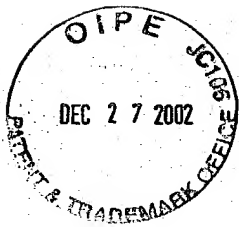
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TGACCTTGGCAGTTTGATAGGAATAGCATTGAATCTATAGATTGCTTTGGGCAGTATGCTATTTAATG
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FIG. 16A(23)

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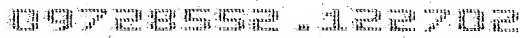


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W
AGCAATGTTTTAGTTTTCTTTGTAGAGATCCTCCTAGGATTTTCATTTTTTATGTGACTATTTTAA
TGGGATTGCATTTCTTCATGTGGCTCTCAGCTTGAATGTTATTTGGTGATAGAAATGCTACAGAGTTTTG
TACACTGATTTCTGTATCCTGAAACCTTACTGAAGTCATTTATCAGTTCTAGGAGCCTTTGGCAAGTCT
GTAGTGTTTTCTAGGTATAGAAATCATATCATTAGCAAGAAAGATAGTTTGACTTCTTCTTTCCCTATT
TGAATGCCCTTTTATTCTTTCCCTTGTCTGATTGCTCTTCCAGTACTACGTTGAATAGGAGTCTGAGA
GTGAGCATCCTTGTCTTGTTCACCTCTCAAGGAAATGGTCCAGCTTTTGCCCATTCATATGATGT
TGCCCATGGGTTGTACAGATGGCTCTTATTATTGAGGTGATTCTTTGATGCCTAGTTTGTCAA
AGGCCTTTATCATGAAGGGATGTTGGATTTTATGAAAGCTTTTCTGGGCTTTATTTGGTGAATTGCA
TTTATTGAATTGTGCATGTTGAGCCAAACTTCCATCCAGGGATTAAACCTACTTAATCATGGTGTAA
CTTTTGTGATGTGCTGGATTGGTTTGGTAAATTTTTTTTTTTTTTAAATGGATTCTCCCTCTGT
CCCCAGGCTGGATTGCAGTGGTGTGATCTTGGCTCACTGCAAGCTCCACCTCCCGATTTTCATGCCATT
CTCCTGCCCTCAGCCTCCCGATTAGCTGGGACTACAGGCACCCGCTACCATACCCAGCTAAATTTTGTAT
TTTTTAGTAAACACAGGATTTACCATGTTAGCCAGGATGGTCTTGATCTCCTGACCTCGTGTATGCC
TGCCCTCAGCCTCCCAAGTGGTAGTATTTTTTAATTAATTTTCTCACCTTGTGCTGCCATCTTA
TGATTTTCTAGTATTTTGTGAAGATTTTGTGATCTATTTTTCATCAGGATATTGGCTGTAATTTCT
TTTTTTCATTTTTCATCTTTTACCACATTTTGTATCAGGTTTCTACTGGCTTCATAGAAATGAGTTCAGGAAT
GGTCCCTCCTCCTCGAATTTTCTGTGAGAAATAGTACAGCTCTTGTGTCTGGGAGAAATTTGTAT
GCCAATAATTTAAATGCAGTTAATAATTTACTGGACAATTTCTCCAGATAATTTGTATGATTTTGTGT
CCACCCTGAGTTGATACATGATTTTAAATGTATCATGTTGATAAGAGCAAGAGATTTTGGTCACCT
AGTCTTGCCCTATAGATGTGCTAATGATTCAAAGTAGATATTTTGGAGCCTAACAGGTGCCGTGACTA
GGCAGTTTGTGTTTTTTTTTTTGTAGACAGAGTCTCGTTATGCTGCCCAGGCTGGAGTGCAGTGGCA
TGATCTCGGCTCACTGCAACATCCGCTCCTGGTTCAAGCAATTTATCTGCTCAGCCTCCCCAGTAG
CTGGGACTACAGGCTCAGGCCACCCAGCCTGGCTAATTTTGTATTTTGTAGTAGAGATGGGTTTCACC
ATATTGGCCAGGCTGGTGTGAACCTCCTGGCTCATGATCCACCCGCTGGCCTCCCAATGTGCTGGG
CTTACAGGCGTGAGCCACCCGAGATTAGGCAATTTTATATTTCCCAATATCCAACTCTTCTGA
CCCCCTTCTCAGCCTGGTGTATCAGGCACAAGGCTGTTGAGATTATGTTGTTCTGAGAGATATGGC
TCTCCAGGTTGACAATGTGATAAGGATTCACCTGGTTAGGATTTACACATTCGCCTTGAATGTCTG
TTGCATCAAGTAGACAGTCCATCCCACTTGGCCTTTGGTACAGCTGTAAGGAGACAAAGGAGTGGG
CAGCCGCTGCTGTGAAGTCTTGGACAAAGACTGCCAATAGCTATCAGACAGTGTAAACAACAGCTGA
TTTAGGTTGAAGGGGCGAGTCTCTTGGGCCACTTACTATGCTGCATCATCTCTTTGGAAATGCTCT
TCAGGTAACCTGCCTAACAGACTGAGAAATAAATGCTCACAGAGAAAAAGACCCGGAAAGTCTGACT

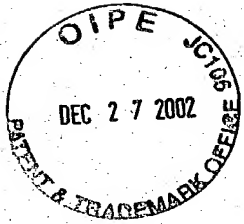
FIG. 16A(24)



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TCTCAGAGCTCAGTGTTTAGGTGCAGAACTGGATTGTGAAAGGATTTTAAATTTTATATATTCATTGCG
AGGGAACATTCATTTATTCATCCTTCTCCACTCCCACTGCTGTGCTGTTGTTGCTCTGTCTCTCC
CACCTCTCTCTAGAC
AC
GAGAGAAAAGCCTCAATCTGAGGAAGCTGTGCTGACTAGCCTTGCTCTTAATCATGGAGACAAATGCTTT
ATGCCCTTATCTTTGCACAGCTGAAAGCCATGGCAGAAGCAGTCTCTAAACGAAATAAAATAGAAAAGG
TTCTCTGCTAAGCCCTGGCAAATGCAGCCTTCTATCCCTCCCAACACTCACAGCTTCTGAGCAAGATG
TAGCTGCCCTCCAGGAGCTGGGTGATGGGCAATAATGAGCAGAGCCACGTAAGGAAAGATGGGTGAA
GAAATGTGTGGAGGTGATGCTGGCTGCACTGACCATGAAACAAGGATCTACCCCTCTAGTAACCTGC
CTACTCCTTTGGTAACTGTTCTGAAATTATAACTTGCCAGAAAGTTCAGAAAGACCTAGTGCAGGTATT
AGAGGAAATTCGTAAGATTGAGCCATTATTCCTGCACAGATACATAAATAATGGACACGGGCCATGGTG
GCCAGCAATCTTGCTCTTGACAAATGGTGAAGGAAGGTTGTAGTCTATGGCTATGCTCTCAGAATTAT
AATGGAAAGAAACAGCTCCTGAGTGTTTACTATGAGCCCAAGGCTGTGCTAAACACTTTACCATATGAT
GACATCTTTTCTCAGAGGTATCAAAAACAATAGGACATACCGGATAGCTACAATCTTTGGGCCCTG
CAACACACAATAATGTGATTCTCTTCAAATCCTACATATTGCTACAAACTGTATCCCTGAGGCATA
TTCAATGTAAAATAAAACATATAAGTACTACTTTGTTTTTGAGATGGAGTCTCGCTCTGTCACCC
AGACTGGAGTGCAATAGCATGATCGTGGCTCACTGCAACCCCTGCTCCTGGCTCAAGTGATTCTCCT
GACTCAGCCTCTCAAGTAGCTGGGATTACAGCGGCACGCCCATGCCCTGCTAAATTTTGTACTTTTA
ATAGAGACCAGGTTTACCATGTTGGCCAGGCTGGTCTCAAACCTCCTGACCTCAAGTGATCCACCTGCC
TCGGCCTTCCAAAGTGCTGGCATTACAGATGTGAGCCACTGCACCCGCCCATATAAAGTACTACTAAT
GTAACAGGGTGCTAGTCCAGACAGTGACCAACAGTGGTGTTCATTGAAGCTGGACTAACAACTCCAGC
CTCTCCGCCATCACAGAGTGATGACTGCCCTTCCCTGAAGCAAGCTTCTGGTTCAAGGAAAGCCAGTA
AGTGACTGCTCTTTGTATACATGTTAGATGATCAGGCCCTCAAGAAAAGTATAAGAGATCTTTGTG
CTCTCTGGACTCAAAAAGCTGCACCTCTTTGGGGAAGGATAGCCAGGTAAAAGTGGCCAGGTAAGA
GGCCCTGTACACCTGGTCTGCAAGATGTTAGACACAAAAATGAGAGCCACATTTGGAGCTTATGTGC
CCCTAACTCTGTACATAAATGCAAGATCTAATTAATAACAACTGGAATCTTGGAAACACCTGTAGTAC
ATCCTTGGCTAAGGTTAGCCCCAACAGAGAGGCTCTCCTCTTACAGAGAACCATTACATTTGTGCCCTT
CATCTAGAGTAGAAAAGGCATGATCAGACTACTAAAAGACATCAGGAAAGGCCCTGTGACATCTGAG
GGAAGTGTGCCCCTCTCTGGGATGTTGGTTCGGGAAGAGGGCATGGAGGAGTGCCCTGCTTTAGATGG
TCATTCAGGAACCCAGGCTGATAGTGAGAGGTGAAGCCAGCTGGGCTTCTGGGCTAGGGGGACTTGA
GAACTTTTGTCTAGCTAAAGGATTGTAATGCACCAATCAGCACTCTGTAAAAATGGACCAATCAGCA
CTCTGTAAAATGGACCAATCAGCAGGATGTGGGCAGGGCCAAATAAGGGAATAAAAGCTGGCCACACAGA

FIG. 16A(25)



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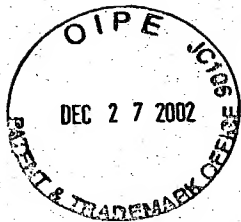
178/223

Y

GCCAGCAGTGGCAAACTGCTCAGGTCCCCTTCCACGCTGTGGAAGCTTTGTTCTTTGCTCTTCACAAAT
AAATCTTGCTGCTGCTCACTCTTTGGGTCTGCACTATCTTTATGAGCTGTAAACACTCACCGTGAGGGTC
TGTGGCTTCATTCTGAGTCACTGAGACCAACACCCACTGGGAGGAACAAACAACTCTGGACACGGC
AACTTTAAGAGCTGTAACTTCACTGCGAAGGTCTGCGGCTTCACCTCTGAAGTCAGCGAGACTATGAA
CCCAGTGAAGGAAGAACTCCAGACACATCTGAACATCTGAAGGAAGAACTCCAGACACACCATCTT
TAAGAGCTGTAACTCACTGCAAGGTCTGCGGCTTCATTCTTGAAGTCAGCAAGACCAAGAACCCAC
TGGAGGAACAAATTCGGGACACATTTTGGTGACCCAGATGGGACTATCACCAAGTGGTGAGTACCATC
AACCCCTTCACTTGTATTCTGTCTCTATTCTTCTTAGAATTCGGGGCTAAATATTGGGCACCTGTC
AGCCAGTTAAAGCGACTAGCATGGCTGCCAGACTTAAGAGACTAAAGACACACGGGTGTGAGACTTTCTG
GGAAGGGCTCTCTAATAACCCCAACTCTTTGGAGTTGGAGCGTTGGTTGCCCTGGAACCAAGCTTCC
ACATTTCTCTGACTTCTGGGCTGAGACGAGGTCAACAGAGAGGAAGCCATTGAGCTCTGGGTCCCCG
ACAGCAAGTTGGTTGACCTGTGGCCATGAACAGAACTCTCGAAGTCATGTTGCCCAAGCGAGACTCAC
CCATCTATCTATCTATCTGACTCTTGGCTTCTGGTCTTAATGCTGGAAGACAAACCTTCCCTCTTG
TCTCTGTTCTCCAAGGCTAGTCCCACTTCTAAAACCACTCCCTGCTCTCTGGTCTTTCTAGTTCTC
CTATAAGAAATGATTTCTAGTATAAATCTCCAGGACTATTTCTCTTTTAGGCACCCGGGCTCACCAAT
CAGAAAGCCATAATTTTGGCCAAAGCCCATCTTAGGGGGAATCTGGAATTTTAGGATCCCTCCT
CAGACAAGCAGGCCCTAACAAAGCTATTCTGAAGCTAGGATATGGGAGCCCTCAGAAATGATATCCTT
CCTATTCAAGTGAGGACAAAGGCACTCACTCTTCCAAATCTGGAATCCCTTCCCTCAGGGTATG
GCCCTCCACTTCACTTTTGGGGCATAACGCTCTTATAGGACACGGGTAAAGTCCCAATGCTAACAGGAG
AATGTTTAGGACTCTAACAGGTTTCAAGAAATGTGTCGGAAGGGCCACTAAATCCGATTTTCTCAGT
CCTCTTGTGGTCTAGGAGGACAGGTAAGGGTGCAGGTTTCAAAAATGTGTTGTAAGGGCCACTAAA
TCTGACATTCCTTGGTCTCTGTTGCTAGGAGGAACAACTAGTGTCTCTGCTGCTGCATCAGTGAGC
GCAACTATTCCAATCAACAGGTCAGGGACCAATTGTGGGTTCTTGGGCAAGAGGTGTTCTGCTGCTG
CATTGGTGGGCTCACTATTCCAATCAGCAGGTCAGTGACCTTTGCGGGTCTTGGGTGCGGGGTG
GGGGAAACAAACAGACCAAACTGGGGCAGTTTGTCTTTCAGATGGGAAACACTCAGGCACCAACAG
GCTCACCCCTTGAAATGTATCCTAAGCCATTGGGACTAATTTGACCCGCAACCCCTGAAAAGAGTGGCT
CATTTTATTCTGCACTATGGCCTGGTCCCAATATTCTCTCTGATGGGGAATAATGGCCACCTGAAGG
AAGTATAAATTACAATACTATCCTGCAGCTTGACCTTTTCTGTAAGAGGAAGCAAAATGGAGTGAAAT
ACCTTATGTCCAAACTTTCTTTTCATTAAAGGAAAATCCACAACTATGCAAAACTTACAAATTCACATCC
CACAAGAGGACCTCTCAGCTTACCCCATATCATAGCTTCCCTATAGCTCCCTTCTCTATTATGATAA
GCCTCCTTAATCTCCCCACCCAGAGGAACAAAGCAAGAAATCTCCAAAGGACCACCAAAAACCCCTG

Z

FIG. 16A(26)



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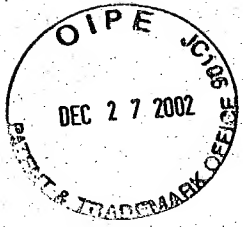
179/223

Z

GGCTATCGGTTATGTCCCTTCAAGCTGTAGCGGGGAGGGGAATTTGGCCCAACCCAGGTACATGTCC
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ATACAGATGTCTACAGGTCTAGGGCAACCTTCAATCTCACTTGGAGAGATGTATGTTAG
ATCAAAACCTGGCCTTTAATTTAAAGAATGTGGCTTAGCCACAGCCCGAGAGTTTGGAGATACCTGGT
ATCTTAGTCAAGTAAATGATAGATGACAGCTGGGGAAGGACAAAGTCTCTCCGGTCAGCAAGCCA
TCCCTAGTGTGGATCCCCACTGGGACCTAGACTCAGATCATTTGGGACTGGAGTCGCAAAACATCTGTTGA
CCTGTGTTCTAGAAAGACTAAGGAGAATTAGGAAAGAGCCCTATGAATTTCAATGATGTCCACCATAA
CTCAGGAAAGGAAGTCTTGCCTTCCCTTGAGTGGCTACAGGGAGGCCCTTAAGGAAAATATAACT
CCCCTGTACCCCAACTCACTTCAAGGGTTAATTGATTTCTAAAGATATGTTTATTACTCAATCAGCTGC
AGATATCAGGAGAAAGCTCCAAAAGCAAGCCCTTGGCCCTGAACAAAATCTGGAGGCATTTATAAACCT
GGCAACCTTGGTGTCTATAATAGGGCCCAAGAGGAGCAGGCCAAAATGGAAAAGCGAGATAAGAGAAA
GGCCACAGCCTTAGTCAATGGCCCTCAGACAAAACAAACCTTGGTGTTCAGAGAGGACAGAAAATGGAGC
AGGCCAATCACCCAGTAGGGCTTGTTCAGTGTGGTTTGCAGGACAGTTTAAAAAAGATTGTCTAT
GAGAAACAAGCTGCCCCCTCACCCATGTCCACTATGCTGAAGCAATCACTGGAAGCCACACTGCCCCAA
AGGACAAAGATTATCTGGGCCAGAACCCCAAGCAGATGATCCAAACACAGGACTGAGGGTGTCTCAGG
GTTAGCGCCAGCTCATGTCACTACCTCACTGAGCCCTGGGTACATTTAACCATTTGAGGCCAGGAAAT
TGACTTCTACTGGACACTGGTGGCGCTTCTCAGTGTAACTCCTGCTGGACAGCTGCTCAAG
GTCTGTTACCATCCGAGGAATCCTGGGACAGCCTATATCCAGGTATTTCTCCACCTCCTCAGTTGTAA
CTGGGAGACTTTGCTACAGATAGTAAATGCTTACCTAATCCTACATGCCCCATGCTGCGATATGGAA
GAAAGGGAATTCCTAACTTCTGGGTGAACCCCATTAATATACAAAGGAACTATGGAGTTATTGCAC
ACAGTGCAAAAACCCAGGAGGTGGCGTCTTACATTTGCCAAGCCATCAAAAGGGGAAGGAGAGGGGA
GAACTGCAGCATAAAGTGGCTGGCAGAGGCGAGGAAAGACAAAGCAGAAAAGGAAAGAGAGAGCAGAA
AGTGAGAGAGAAAGAGAGATAGGAAGTGATAGCAAGAGGGAGTCCGAAAGAAAAGAGAGAGAGAGAG
AGAGGGGAAAGACAGAGAGAGACAGAA
GAGACAAAGAGAGGTCAAGAGAGGGGAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAA
AAAAGCCAGGTTAAATTTAAACCTATAATTGATAATTGAAGGCCCTTTCTGTAAACCTATAATACTCC
AATACCACCTTGTGTGAGTGTAAACCAAGGGTATAGCCCAAAAGCAGTGAAGGCTGACAAACCCGTAG
CCTTCTTATCAAAAATCCTTAACACAGCAGGTTCCTAACAGGGAATCTAAATCTTAAGGTGAGCCAG
ACATAGGAGGAACCTGCCTTCAGGACAGGATGATAGATGTTCTCCAGGTGATTAAAGGAAAAGACAC
AATGGGTATTCAAGTAAAGGAACTCTTATAGAAGCAGAGTTAGGAAAATTTGCCTAATAAGTGG
TCTGCTCAACGTTGAAGCTGTTTGTGCTTGTGCACTCAGCTAAACCTTAAAGTACTTACAGAATCAGGA
AGGAGCCATCTATACCAATTCTAAGTTAATATGGACTGAACGAGGTTTATTATAGCAAGAAAATTA

A' A'

FIG. 16A(27)



00743550, 124702

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A'

AAATCTCAAACTTACAAGGTTTTCAACTAAAGTAAAGTTTGCTAAAAAGTTAACAGCGTAAACATGTATTA
TCCTACTACCTCACACTCTCTCAAAGGATTTCTCAGACAGTTTGCAAAAAAGAACGAAATCTGTCCTTA
CTCTACAATCCCAATAGACTCTTTGGCAGCAGTGAATCTCCAAAACCGCTGAGGCTAGACTCTCTTA
CTGCTGAGAAAGGAAGATTCTGCACCTTTAGGGTAGAGTGTGTTTTATATAACACAGTCAGGGAT
AATATGAGATACACCCAGTGTTTACAGGAAAAGGCTTCTGAAATCAGACAATGCCTTCAAACTCTTA
TACCAACCTCTGGAGTTGGCGACATGGCTTCTCCCTTTCTAGGCTCTGTGACAGCCATCTTGCTAAT
AGTCGCATTTGGGCCCTGTATTTTAACTCTTGGTCAAAATTTGTTTCTCTAGGATCGAGGCCATCAA
GCTACAGATGATCTTACAAATGTAAACCCCAATGAGCTCAACTAACTTCTGCTGAGGACCCCTTGGGA
CCGACCCGCTGGCCCTTTCAATGGCCTAAAGAGCTCCCTCTGGAGGACACTPACCACTGCAGGGGCCCT
TCTTACCCCTATCCAGCAGGAAGTAGCTACAGCGGTCTATCGCCAATCCCAACAGCAGCTGGGTGTC
CTGTTTGGAGGGGGATTGAGAGGTGAAGCCAGCTGGGCTTCTGGGTCAAGTGGGACTTGGAGAACTT
TTGTGCTAGCTAAAGGATTGTAAATGCACCAATCAGCACTCTGTGTCTAGCTAAAGGATTGTAAATGC
ACCAATCAGCACTCTGTAAATGGACCAATCAGCAGGATGTGGCGGGTCAATAGGGAGTAAAAAC
TGGCCACCCGAGCCAGCAGTGGCAACCCACTCGGGTCCCTTCCACACTGTGGAAGCTTTGTTCTTTTG
CTCTTACAAATAAATCTTGCTGCTCATTTCTTGTGTCACACTACCTTTATGAGCTGTAACACTCA
CTGCGAGGGTCTGTGGCTTCATTCCTGAAGTCAACAGACCAGAACCCACTGGAAGGAACAAAGAACTC
CCGATGTGCTGCCCTTAAAGAGCTGTAACTCACTCGGAAGCTCTGCAGCTTCACTCCTGAAGTCAGTG
AGACCACAAACCCAGAGGAAGAACTCTGGACACACTGAAATATCTGAAAGGAACAACTCCAGAC
ACCCATCTTTCAGAGCTGTAAACTCACCGCAAGGCTCTGTGGCTTCATTTCTGAAGTCAGCAAGACC
AAGAACCACCGGAAGGAACAAATTCAGACACAGTAGGAATCTGTATTTTGTATCTGTGGCTTCCAG
GGTTACTCCAGTCATTGAAGTCTCCATTGCAGCCTTAAGGAACAGAGAATGGTTGGAGGAGCACATG
TGGGAATTGTTATGGACCAGGCTTGAGATGCACATAGGGCATTTCTGATCAAACTAGCTGGAAGCAGG
GCCAGGAATATAATCTAAGGAAGACAGTTTGTAGACAGTAGTAGTCTTTGCATCTGAGACATGTAG
ATTATCAAGCAATTAATTAGAAAAAATATAGCCAGGTGCGATGGCTCATGCCGTGTAATCCCAGCACTT
GGGAGGCCAAGGGGTGGATCACAAGGTCAAGGCTCAGGCTTCGAGACCAGCTGGCCCAACATGGTGAACCCC
GTCTCTACTAAAAATACAAAAATTAGCCTGGTGGTGGCAGCATCTGTAAATCCAGTACTCAGGAGG
CTGAGGCAGGGGAATCTCTTGAACCTTGGAGGCGAGGTTGCAGTGAGCCAGATCACACCACAGCACT
CCATCTCGGTGACAGAGCGAGACTCTGTCTCAAAAAAAGGAAAGGAAAGGAAATATAATC
AAGAATATTGACAGGTAACATTTATTCAACACTTACTATGCAGCAGGCAATACACTAAGTGTTTTACAT
GGATTAACTCATTTAATCTTAACAATAGCCCTATGAAGTCAGTGTGTTATTATCTCCACTTTATAGAT
AAGGAACTGAAGTACAGAAAGSTCAAGTAGAGAAATGGCCATGCTTGCATTTCTCAGTTTGTGAAGCAA

B'

FIG. 16A(28)



00720000, 110702

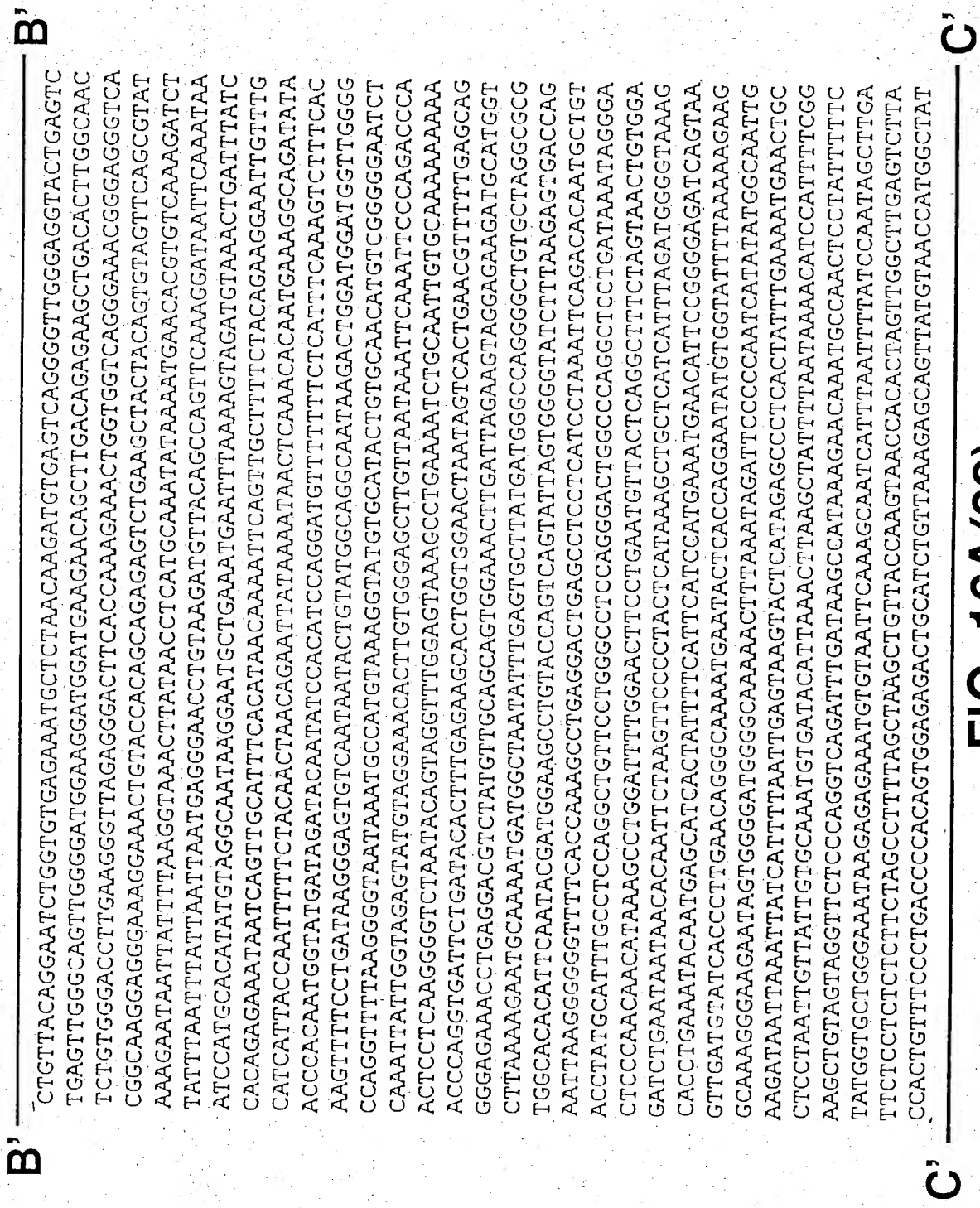
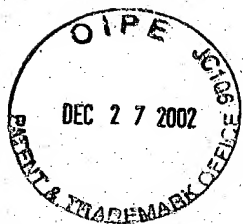


FIG. 16A(29)



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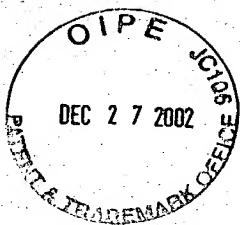
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C'

GCTGAGTGGGATTTCCCAAGGCTTAGGTTCTTTCTGTGAATGACCTTCACCAAGACACCTGAGGTCTGT
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GAAAAGATTACATGACTGCAGTTATTTGAATGCCTCATGGAAGACGCTTATAAATATTATAATTAA
TGTTATCATTAAGTAATGCTTCAATGCAGATCTTCCAAGTATAAATATCAGCTGAGTAAGAAGTCAATC
TTCCCTGAAGCAAAATTTGAAATTTGTAATCGGATTTCTGGAGCTTATTTGTAATACATGATCCAG
AGTGCCATAACACACACAATTTGCTTTTTTCCCTACATGGGCTATTTACAACAAAATTTGGACTTATA
ATGTTTATTTCCAGGGATGACTAGAACCTTAATAACAAACCTTGGGCCAGGCATAGTGGCTCATGCCTA
TAATCACAGCACTTCGGGAGGCTGAGGCTGGTAGATTACTTGAGGCCAGGAGTTTGAGAACAGCCTGGC
CAACATGGCAAAACCCCTGTCTCTACTAAAAATATAAAAATTAGCCGGGTGTTGGCGCATGCCAGTAA
TCCAGTTACTAAGTAGGCTGAGGTACGACAATCGCTGGAACCTGGAGCGGAGGTTGCAGTGAGCTG
AGATTGCACACTACGCACCTCCAGCCTGGGTGACAGAGAAAGACTCTGTCTCAAAAAAATAAATAAAT
AATAATAATAAACCCTGATGAAAGGTTTCTAAAATGTTTTCATCTAAATGGTTTCTTGACAAATTAA
ATTTCTATATAATGTCAGTTTCAAAAAAATGAGAACGACCACTGCATATCGACTGCTTAAAGA
AAATACGTATATTTACAACATATACAGTACTGTCTTTTGTCTGTTAGTTTAGAGTTAGATAAAC
TGCAGTATGTTGTAGTGGACAGATCATAGAACTAGGAGTCAGGATGTCTGGATTCTAGGAAGCAATGA
ATAGTTGCACGGTGCAGACCAGCATCATGAGTATCCTCAGGGAGCTTGTAGAAGTGCAGATCCTTTA
ACTCATTTGAATCAGAAATCCCTAGGTGTGGGGCCCTGAAATCTGTATTTTAGCAGGCTCTCTGGGATGT
GATGTGCTTAGAGTTTGACAACCACTGGGTAGCTGATCTGACTTAGACTTATCAGGCATGTGATCTT
GAACAAGTCACATAATCTCACTGAGTTCAGTTTCTTATGCTTAAATAGGCCCAATAATATCTATTTC
ACATGGACTGCTTTGAGGATTAGGCAAGAGATCTGTAACAGACACTGTAGAACAGTGTCTCTGGTCTAC
AGCTGACCTTCCATAAATGGTAGTTGCCCTTGATCTCTGCTCTGCCACATAAATAGCTGGTTAACTATGAG
CAAGTAATTTAGTTCTTCTCAGTTTAGTTTCTTCACTGTAAAGAGGAAATAAATACTGTTATACTCAA
TTTCTGAAGTGGCTATAAAAAATCAGTTTAAATTTATGGCATTGAAGCTCTTTGTACACTGTATAAGGAC
TGTAACATCTAAGGGATTAAATGAGACCAAGCTTATGATTTTAAGCATGGAGTAAATAGTAACACTGACTC
TGTTCTATGAACCCACATGGAAACTCTAAAGAATATGCACATTTGAAACACAGGATCATCTGGGGAAGG
TGATCTGCTCACCCAAACCAAGTTTATGAAACATCAATCTCCAGTGGGCTGCTGGAGCTAGCTGTACCAGC
TCATGAGGGCCAAATTTGTTTATTTTAGGAATTTTGTGCTGCTTAAAAAATAGTCATTTATTTAAAAAT
AAATTAATGTAACAATAATATTAGATAAAATAAGTTAAAAATAAACAAGGAACATAATATCCCCAAA
CTCTTCCCCACCTAATTTTACTATCTGTGCTTGGGATTTTACATTTGATTTTATCCATATGGTG
ACAATACTATTTCATATATAAATGGTGTGCTTCTTTCATAAATCTACATAGCCTGATGTGAGGCTAGTA

D'

FIG. 16A(30)

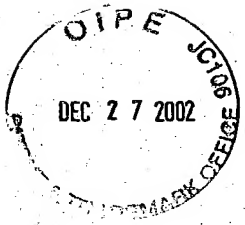


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D' GCTTGAATTTGGCCACAGTGGGAGTGTGAGCATTTGTACCATGAGGCTTGGCCAAGGCTACAAATCCAG
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TTAATTTACCACAGTCCAGGTTCTGACCTAGACTTAGAAACCTGGATTTGTGAGCAAGCTGAGGATAGA
GCCATTATTTTAAAGAGGACTCACATTACCCAAAGTGCAGGCTGATATATACCTTCAGAAATATCAAT
TTATTAAATTTACAGTGAAGAAAGCCACCCAGGGCATTTCCCGAGGGAAGGCAAAAGAGCTAGTTGCA
CATTTGAATGTTGATGACATTAGGTAAGGTGACACAGAAATATCCATTTCCACAACCTGAGATACCTG
CTGCCTTAAGGAAGGACAGGCAAGTCCCTTGGCAGGACCTTAGATTGTCACTGTCCATCTTGTCTCTAG
GACTCTCCTTTCCAGGCATGACGATGGCCAACTCTGTCCCTCCTACCTACTGATGGGATATCTTTTCT
TGACACATGGCAATGCCCTCCAATCAGAGGCTGGTAGCTATTTTAACTTTCAGGGCAGTATTTTTCAAA
GGGAAGTTCATGGACCATATGCATCTGTATCATTTAGATGTATATTAATAAATGCTTAGTCTTCCCCAGT
TATACTAGATCAGAAATCTCTGTGGTGGGCCCCACGAATCGGTATTTTCAACAAATCACCTAGGTAATTT
CTGTATATACTATAGTGTGAAGACCACCTGCTTGAAGGTTTCTTTCATATCTCCACTAAATATAAAAA
TATTGACTTCTAGATTTAACTCCCAAGCAGCTTGCAATTTTAAAGTTTCTGGGGCATTATATTGTGGTA
CCCCATACCACCTCACACTCTAGTCAGGAGGTATATTGGAAGTGAATGTTGTGTCCCTCCAAAACCTC
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CCTCATGAATGGGATTAGTGCCTTTAGAAAGAGAGCTCCGTCACTGTCTTTCCATCAATTTGAAGATGCA
GTGAGAAGCTGGTAGTCTTGCATCTGGAAGAGGGCCCCACACAACCTGATCATGTGGCACCTGGTCT
CAGACTTCTGCCTCCAGAAGTATGAGATGATAAATTTCTGTTTATACACCCACCCAGGCTACAATA
TTAGGTTGCTGCAAGTATTTGTGATTTTGCCTTTACTTTTCAGGGCAAAAACCTGCAATTACTTTTGT
GCCAACCTAATATTTTGTATAGCAGCCCGAACTAAGGCAAGGAGACTACATCAGACAGTGTAGCTAT
GTAAGTACAAATGTATCCCTGTTGAGGAAACTAAGTTCTAACCTGACTTCAGGCCAGTAGCCACCTT
TTCAATCTCTTTTCATGAAGGACCATTTATCATCTACTGTTGGCAAAATAGAGGCACGAGAAATGGAA
TTTGCTTTTCTGTGAAATCTCAGTGTATACAGATTGAAGAGCAAGGTTTGTCTTTTCATCTCTAAGAAC
AAAGTGAGTACGGACTGGCACATTTATCAGAGAAAGAAATCATTTAGCTCGGTGGGTCTTAACCCAGGAG
TGAATTTGACTCCAGGGAACAGTTGGCAATGTCTGGAGACGTTTTTTATTTGTTATAGCTGGGGATGAG
TGGGTGGGTTGCTACTGGCATCTAGTGGGTGGAGACCAGAGATGCTGTAAACATCCCGCAAGCACAG
GACAGTCCCCGACACAAGAATTTATCTGGCCCCCAATATCAATAGTGCCAAAGTTGAGAAACCTCAT
CTAGCTTCTTTTCCCTTCTACGTTCTAATCAACTGTTGTTCTTTTCAGCATTAGGATTCATCCAGCAGT
CTCTTTCCCCAGCAATTTGTTGAAATTTTTTAAATAATGGACTCATTTTAGTGTCAAGAAAAAATA
CATTCACAGGAAGGATGGGTCAATTTTGTGTTAATGATGTTTTGCTTTTCACATAGCAAAAGCTTAATA
AGTATTTTAAATAAAATGGTGAATAGATCAAAACATTAATTTTCACATGTGTTTTTAATAAATAACAGGA
AGATGGCTATATATAAAATTTGTTGTATATGTCTTGAGTGGATCATCAACACACAAACGATATCTAC
E'

FIG. 16A(31)



09740553 122702

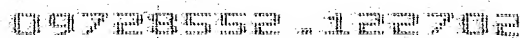
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E'

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TATGACTAAAAAGAAAGTATGAGCTCCCTGCATGCCCTGTAATTTGAAATGGAATGACAGCCAAACCCAGTTAAT
TATAAAAACAGCTAATTTAACAGGTTTTCAAATTTGTTCTTCTCCAAAGTACATATAGTCAATAATC
CTTAAAGAGAAAGCAAGAGGGGAGCACTGAACCAATTTGCTTTTGTACCTGCTCAGCTCAAT
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AGAGGTATAATCCCAGACTTTGATTGAGCTATAGAGAATGACAATAGTGTGAGAGGCTTCCAAACCCAGAG
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AAGCATTTCTAAGTCACAGGATGAGACAGGAGGTGAGCAGCAAGACCTTGTGATAAAACAGGTTGTAATA
AAGAAGCCAGCCAAACCCACCAAAACCAAGATGGCCATGAGAGTTATCTGTGTTGGTCTCACTGCTC
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TACATTTGGCAACTTCCGGAAAGTTACCTCTATGGTCTAAAAAGGGGAGGAACCCCTCACCTCCCAGAAAT
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TTCTTAATAAAGTGTGCTTACTGTATGGACTCCCTGTGAATTTCTTGTCAAGAGATCCCAAG
AACTCTCTCTTGGGCTGTGGATCAGGACCTCTTCCAGTAACAATAGTAGTAAGGGGTGAGGGAGACTG
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TAGAATTTTATAGCTGATAGGATTAGAAATTTCAAAATTCATTTTCAATTAATTTTCTGCGAAAAACA
GATGGCCAGAGAGGCCAAACAATTTGTTAAGGAGCACTGAGGGCAGACCCACACTGGAACGCAACCCCTCT
TAGCAGAGTATACAAAGGCTTTGATCTCCTCAGTCAGAAATGAAGTAACTTCCAGGGTACCCCTTCT
GACTGTTTAGCATGTTTGCAGCTGACTAATTTTGAAGTTGCTTAAATATCTGTCAATTTCCACTGTAT
CATAATCTCCTCATCTTCAATCTCCAATGCCCTTGAAGTCACTAGTAAATGTTAGTTGAACAAAAAGTAA
ATTGAACCCAGAAATTTCTGATCATAATCTGGAGCACTTTAAATTTGTCAGCTTACTGGGAAACGGGATA
ACATGTGATTGTCTTTGATTTTCTCATATGCTTTTCCACCTATAGATGCTACACGAATGTT
TTTAAAAATCTGATATAAAAAATTAATAATTAATAAAGAAATTTGATACAAATGCTACATTTA
GAGTGTGTGATTAGATTCCTTAAGTGTATCATGGTATCTCTACATCAGCTGGTGATCAAAATGCTTT
GGGTTTAAACACATAACTGACAAAGGCTTGGGACATGTAAGATCCCAATACATTTTATGATTTT
TTTTCTTGTGCTCTTTTAAATAAATTTTGTGTTAATAAGAAATTAATTCATGTTTCAAGTGGAGAAAC
CATAGAAAATAGTGACAAGTGAAGGAATAAATTTAAATGACCCATAATTTGATACATATCTGATTT
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F'

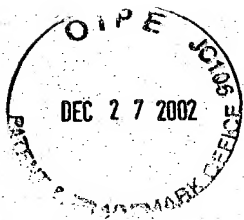
FIG. 16A(32)



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TCACATATAGGCGAAATGGCCCGACGTCGCATGCTCCCGCGCCCATGACCGCGGATTATGTCTCTA
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AAAGAGAGGTTGGAATAATCCACTAATTATATCCGTTAAGCTTCAGTTACGCTAATAAGGAATATCAC
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TAATTTCTGCAGTTCACATGTTCTCAGCATATTTCTTTTGATACGTGACTGCTTAATATGACAAATAGCA
GAACCATGGTAGCTTGAGGCATTACTTTTCTTTTAAATTTCTTTTACATTTTGAATTTTACCAGCACTCA
CATTTGTATTACTTTTGGGTTTACTGAGGATCTATAACTTATAGATCAAAATACCTGACATATATATGC
ATTCTCTGAAGTCTTAGGGCAGAACTAGAACATTTCTGTGAACATCAGTATAAGATATTAATAATGGAAG
TTTTTGCCTAAGACTGAAGACAATAAAATATCATAGTCTGAAATGAATGCCAGCACACCATACAGGATT
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GGTAGGGGAAATCAGTTTACAATTATTAAGTATTTTACCCTTGACAAGAGTATATATATTGGAAATC
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CAGGGTAGGAGAGGCTGTGCTCCTCAAGCATAGTTGGAAAAGGACCTCAACAAGACCCTTCAAGAGT
CTAATGTGTGGAGACTGTTGCTTAGGGAGACCTTATGGTCTAGCTTCTGACTCACAGCTAAGTCAAGGA
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CCAGTCAGCTGTAACATATGCCGAGCCTAGTAAACTCAGATACTAAGTTACCAGGGTACCTGGCAAGT
AAGAACATTCCTGATTCCTTCCCTCTCTCTCTTTGCCCCCAACCTTAGTGGCTAGCAAGATGGG
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CTCATCATAGGCCTGAGCTGGGGAATCAGGAAGAAGGATTCTTTTAAAAACTGAAGTAAACGTTATCAT
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FIG. 16A(33)

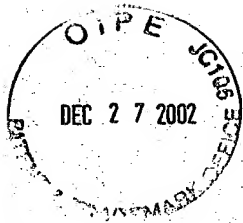


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GGTTTGAAGAAGGAAGGGCAGAAAATTAACCTACTTCTCCAGCGATCTCCTTCAAAATCTGT
GCCCTTCTCAGGCCAGGCCTCAATTTACTGAGCAGTCACACCTCACAGAGGAGGCTCTGGGCAATC
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H' FIG. 16A(34)

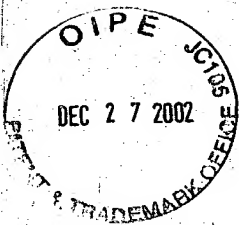


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I'

FIG. 16A(35)

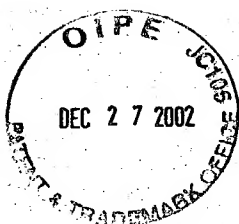


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I' J'
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GGTTCAAGCAATTCCTCGGCTCAGCCTCCTGAGTAGTGGGACTACAGGTGCAATGCCACACGTCCTG
GCTAATTTTGTATTTAGGAGAGAGAGGTTTCAACCATGTTGCCAGGCTGGTCACGAACTCCTGAGC
TCAGGCAATCCGCCCTCCTCGGCTCCCAAGTGTGGGATTAACAGGAGTGAGCCACCTCACCTGGCCC
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CCTCAAAATAAAATGTGGTCTTCTCAAGGATTTGGCCCATGTTCTATCCATCTGTAGATATCACAGCAC
CTAGCAGTGCTTTTCACAGAGGAAGTACACAACTGGCATTATTGATTCTATGCTCCATTTTCTCTCT
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FIG. 16A(36)



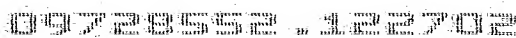
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J'

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CACCGTGAGAGAGAAATGAGAAAGCTGGGCTCTCAGGTAATCTTGGTTTTTTCACAAAGCCCCCTAATT
TTACTGCATAATTATTTTGAATTCAGTGAATAATTTCTACAATTTTCCCATAAAGTCACTACACACAATA
CCCTCTCATGCAACACTTGGCTTTGCTAATAACATATCTATTATGAGAGTGTGCTTCTTAAGCGTAAAT
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GCTCACTTATCATAAGGAAGTCATTAGCTAAGGAACAACCACTAACAATCTATGTAATTAGAGAACAAG
CTGGTTTTGCTCAATATAAATAAAGAAAAAGAAACCATGTGAAAGTCAAAATATTTGTTAATCAGGT
CATTGAGAACTATTAATAAGTATTGTAATCTTTATGATGAGAACTATCTTGACTCAAGTGGACAGTG
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FIG. 16A(37)



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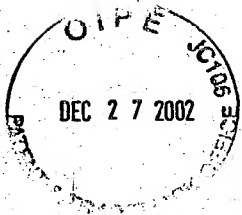
BAC-F2 sequence contigs

Contig 1 (5596 bp)

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A _____ A

FIG. 16B(1)



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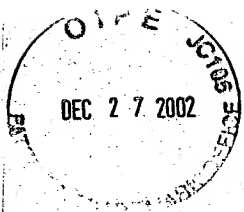
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G A A A T A C A G T G T T A A G A A A A T G A A C A G G C A T G A A A A C C A T G S C T A T T T G A T A A A A G T A A A T T T C T G
C A G T T C A C A T G T T C T C A G C A T A T T T C T T G A T A C T G A C T T G C T T A A T A T A G C A A T A G C A G A A C C A T G G
T A G C T T G T A G G C A T T A C T T T T C T T T A A T T T C T T T A C A T T T T G A A T T T A C C A G C A C T C A C A T T T G T A T
T A C T T T T G G G T T A T A C T G A G G A T C T A T A A C T T A T A G A T C A A A T A C C T G A C A T A T A T A T G C A T T C T C T G A
A G T C T T A G G G C A G A A C T A G A A C A T T C T T G T G A A C A T C A G T A T A G A T A T A A A A T G G A A G T T T G C C T A
A G A C T G A A G A C A A T A A A A A T A T C A T A G T C T G A A T G A A T G C C A G C A C A C C A T A C A G G A T T T A A A T A T C T
A T A C A T A T A T A T G T G T G T A T T A T A T A T T T A A T A T A T A T C T G T G G G A T A G G A A G A G T A G G G G
A A A T C A G T T T T A C A A T T A T T A A G T A T T T A C C C T T G A C A A G A G A T A T A T A T T G G A A A T C A G T T G G A G A
G T A T T T C A A G A T A A A T G T T A G T G T G C T A T G A A T G A A T C C A C C C T A C C A C C A C T G A G G C A G G T A G G
A G A G G C C T G T G C C T C A A G C A T A G T T G G A A A G G A C C T C A A C A A G A C C A C T T C A A G A G T C T A A T G T G T
G G A G A C T G T T G C T T A G G G A G A C C T T A T G T C T A G C T T C T G A C T C A C A G C T A A G T C A G G G A G A C A G G T T G
G C T G C T G A T C G T G G A G T C C A A A A G A T G G C C T G C A C T G A A A A G C C T C A T G A G T T G A C T T A G G G C T A
G T C T A A G A G G T C C C T G G A A G A A A A C A C T C A G T A G G A G A A G A G C T G G A G G T A C C T T C A G T G C T G A A T T
G G A A C C T A G A T T C A T T C C C C C G T G G A G C A A A T T A C A T A G A A A G A T G C C C A G T A T G G A G A G T G G G G T
G T C T C T A A C A A T T A C C C A C C C A C C T G C C C C C A C C C T A A G A A A A A G A A A A T C A C A T A C A A C C A G T C A G C
T G T A A C A T A T G C C G A G C C T A G T A A A C T C A G A T A C T A A G T T A C C A G G T A C C T G G C A A G T A A G A A C A T T
C C T G A T T C C C T T C C T C T T C C T T T G C C C T C C A A C C T T A G T G G C T A G C A A G A T G G G A G A G G A G G
A G A G C T G T A A G T G G G A A A A A A A G A G C A G C T T C T C T C C T T T C A G C T G C T G G A T T C T C C C T C A T C A T A
G G C C T G A G C T G G G A A T C A G G A A G A A G G A T T C T T T T A A A C T G A A G T A A C G T A A C G T T A C A T T T T A A
A A C A T T T T A A A T T T G A C A A T G T G A G A T T A G A T A T A C T A A T T A A A C T A A A C T A A G A T T A T G T T T G C A G C
T T G A A G T G A T A A G A A A A C C T T A T C T A A G A G C A T C C A G G A A A G T C G G G G T T T C C T G A A C A T C C C T T
T A A A T C C T T T G G A A G T C A G C T T T C A G A G A G G A T T T A A A G T G T A G A C T G G G C C T T C A G A A A C T T G G T T A A
T G T A G G G T T T C C T A T G C A G A C T T G G G A C T A T A C C T T G T G T G G A A G A G A A A A T A A G A T T A T C T T A C
A T T T T T C C C A T T C C T T T T C A A A A A A A A A G C T C A G C T A G C A T G A A A G T T A A A T T C A A A A C G T A A T G G G T
A T T A T T T G C A T A T T C A A A T C T A G T G C A T A T C A T G T A A G T A C T G A A T T A T G T A T T C A T T A T T T C A A A T G
A C A A G C T G G A T T T T T T T T T C G A A T T T C A C A A A T T A A T T T C C C T T G G A A C C T T T T G G T T T G G C C T
T A A G A G T T T A G G C T T T C A C A A A A G A G A G A C A G C C T T G A A G A T T A A A G T G T G G C C T C T T C T C A A G A
T G T T C T T A G T C C A G C A A A G G A T T C T A T G C A T A T T T G G G C T T C C T T C T G T C T C A T A A C C T G T A T T T C T T G

B

FIG. 16B(2)

B



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B

ATATTCTATTATATTCTGTAAGATTTTTTTTTTAAAGGAAAAAATCTTCCATGGTTGAAGGACATGTC
AAAAATAGAGGATACAGTTTTTATATCAAGGAAGTTTCATGATATGACTGTAGAAGCTCATTTGACTTA
AGACACATCATTTCCATGGAAGTTTAAACAGATCTGTACAATAAGGTTGGCAATCTTTGTGTAAAA
CAGTTTTTTTTCTCCTGCTCTAAAGAAAGTGATATTTCAAAATGTGAATGTGAGAGTCAGAGTCAGAAAAATAG
TATTTTTTTAACTTCGTTTTCAAGTCCTCAAAAACCTGTACCTAATCATGAATTTTTTTTCCACAGA
TTGTTTTCTTCTCCCTCCACAGAACTTTGAAGTTTTCTACATGACACAGGACCTATGCTTTTTT
TAATTACACAGAAATGAAGAAAAAAAGTGTGTGATCGTTAACCAAAATATATGAATCTTTAAGCTG
TATTTTTTAACTTTGTTTTGCAAGAGGCCATTCCTTTGGTTAAATAATTTGTTATTCACAGT
TTCCCTGTCCCTCATATTATCAAGGGGAAAAATTGAGAAATTTAAAGGAAGCTCTAGGCAATGTTTTCA
TCCCTGAATCTTTGGAGAGTTATAAAAAACAAACAGATTACTGAACCTGTAAAGAACCAATCGTGAAGT
CATTAACATCTAAGCATAAGCAAAATCTCCTCTTGGATCATTAAGTTATAGAAGAAAAAGAAAGCCCTGCAC
TTTGAATTTAAATAAAGCTTGGTAACTTGTAAAGTCAAAACACGTAATAATTTACAATTCAGGAATATCG
ATAGCAGTTGAGTTAATAGACTTCTCACATTCCAAATTTAAAGCTTCTCTCTGTGCTAATAGAGAT
ACAATAGCAGTAGCGTTTAAAGAAGATGAATCAACAATTTAAACTATAATGTGTTTTTTATTCATCT
CCCTTATTCACATATATTGTTTTTTTGAAGGAGTTCTGCTCTGTGCGCCAGGAGGAGTGCTGT
GGCAGGATCTCAGCTCACCGCAACCTCTGCCCTCCGGTTCAAGCGATTCTCTGCTCAGCCCTCCTGA
GTAGCTGCGATTACAGGCGTGGCCAGCAACCCCGGCTAATTTTTGTATTTTAGTAGAGACAGGTTTT
CACCACGTTGGCCAGTTGGTCTCGAACCCCTGATCTCAAGTGATCAGCCCGCTCGGCCCTCCCAAAGT
GCTGGGATTACAGCGGTGAGCCATCACTTCTGGCCCTTATTGCGATACAATTTAAAAATCATCACAGAA
GGTTTGAAGAAGGAAGGGCAGAAAAATACCTACTTTTCTCTCCCGAGCGATCTCCTTCAAAATCTGT
GCCCTTTCCCTCAGGCCCCAGGCTCAATTTACTGAGCAGTACACCTCACAGAGGAGGCTCTGGGCAATC
CACTCTTGGTCACAGGAAAGCCATTGACCTCCCACTTCCCTCCACCTTGTCTCAACTCTTGAC
TTTGGGCTTTGTTTCTGTTCAAGTCCTAGGAACTGTTTCTTTATCAGGTTAAGTGATTAGTTCTCTT
TCCCTCTAGTTGCTCTCACTCCCTGACTCGGGGATCCACTAGTTCTAGAGCGGCCGCCCGGTGGA
CTCACAG

C

Contig 2 (18457 bp)

GAGGGGGGAACCCCTTTCCAAAAAAGAAACAAAGACAGGATAAACATTCTAGATAGTCTCTATA
ATGGTCATGATTAAGACATAAAATAGTCTGAAATTGTCAATATATATTAATAAATTTATTTGGCCA
TTCTGCCAAGTAGCAGACACCTGTCAATCTGCCCACTCAGCACCTCTCTTTCTTTAGGGAAATGCTAC
CCACTCTTTGCATGGGTTCTGGATGGAACCTGTTGATCACAGTGTTTTCACTCCCCCATTTTGCCTCACCA

FIG. 16B(3)

C

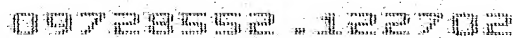


FIG. 16B(4)



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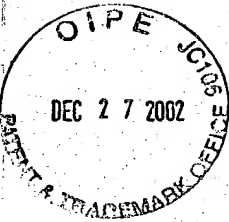
D

CTCCTACTTGCTGAGTGAATGGAACCATCTGTGGCTGCTGCATATGATATTGTCAACTTTGTCAATTC
CACACCCACTCCTTGACGCCCTACCATGTGGTCATAAGACTCCCTTTAAAGTGTTCCTTTAAAAAACAA
AATGTGTTTTTGTCTATAAAATACAGCTCAATGTCAGAACCCCTTGTCTTGTGTTGCTCTCTGATGTAAC
CCTTTCACAAATGTTTGGCAGCTTATCTCTCTATTTCCCTGTAGGGTCCCATCCAGGCCAAAGTGAGT
GCCAGCCTCATTTGGCAGCAGATGCCCTGTGGAAGGCGAGGAGACGAGAGCTAATTGTAACCTTG
TGATTAGCTGTCAATGATGCCCTGGTCCCTGTCAATAGCGCTCAATAAGCCAGAGCCAAAGCGTTCCGT
TCTGCATACTGATTGCTGAGTCAGATTTCTCAGTGCAGAGGGCTTTCTAGGCAGTCAATTTTAGAATA
TTAGTCTTGGTTCTTAAGTGTTAAATCCCTAGCTGGTCTTTAATCTGAGCCTGGAGAAATTTAGTTAT
GGCTGACATCTCTGCTGATATTTTGGCCCTCAATATATATGTCTTTCTCCATCTCTTAGATCCCTGA
ATCATAGAGATATATATGTTATATAATCAACTGTCTCCAGTCTCTAAGAGTGATAAGTACACATTGTGT
CAGGTTGAGGGACAGGAGAACTTTCAAAAGCCTTTCTTGCCCCCTTTTCTCTCTCACTGCCCTCCCACT
AAGTCCAGCCACTTATTATTACAGCTGACACTATCATCATGACCATGAGGTCTTTTGGGGCTACCCCTGGT
TCGGATCCCTCTGGAGGTTTGTGCTTAACTCTGTCTTCACTCTATGAGTCTTTTCAATAAGTTT
CTATTTGGCTAAAGTTGGCCAGAATCTCCTTGTAACCAAGAACAAATAAATACCAGCTTGCAATGT
TCTATGTTGCTTCCACCAACTTATGCAGCACTTCTATCTAATCCACCTACTAGTCTTTTCTTTT
ATTTTTTTGAGACGGAGTCTCGCTCTGTTGCTCAGGATGGAGTGCAATGGTGCAATCTCGGCTCACTG
CAACCTCTGCCTCCCGGTTCAAGCAATTTCCCGGCTCAGCCTCCTGAGTAGCTGGGACTACAGGTGC
ATGCCACACGTCCGGCTAATTTTGTATTTTAGGAGAGAGAGGTTTCCACCATGTTGCCAGGCTGGT
CACGAACCTCCTGAGCTCAGGCAATCCGCCCTCCTCGGCTCCCAAGTCTGGGATTACAGGAGTGAGC
CACCTCACCTGGCCCCGACCTACTAGTCTTTAGTGTGTTGCTTCTTCTTCTATTGGGTAATGTCTGTTTAT
ATGCATGTCTTGTCTCAATATAAATGTGGTCTTCTCAAGGTATTGGCCCATGTTCTATCCATCTG
TAGATATCACAGCACCTAGCAGTGTCTTTCACAGAGGAAGTACACAACTGGCATTTATTGATTCAATTGCT
CCATTTTCTCTTATCCCCAGCATTTCTCAATAATTTCAACATCTCCATTTGGAGTACCCGGAGAA
AGCAGGTAGCTTTACTTGCAGCTATGTTTCTATCCCCATAGTAATAAAGAGGACCCAGAGAAACATG
TTTAAATGCTGCTGTTATCAGGACCTCAGCCTTCTGATGCTCCGTGGCTTGGGGTTATTGCTTGAT
CATCTCCTCCCCAACCTACACTGTGTACCTATGCTAGTCTCTTCATGAGGACTAAGCCCATAGTAAAA
GGGCTAGATAAATAGAAAATCATTTTATGTAATTATAAGAACTGAGAACTACTGAGTATTCTGGTGTGTTGT
TTAGGATAAGCACATCTTTATTGATGAGAAAAAGAAAAAGAGAGTGAAAAATATATTAAACGTGCATA
TTGTTTCAAGAACCTTGGATTGCAAGTGACAGAACTCAATTCAAACCAAGTAACTCAAAAGGAAAAATA
TATTGGCTCATGTAACTTCTCACAGAGAGGCGAGGATGGAAGGGGCTTTGGGAACAAAGAGAAATTTGTTT
TCAAATTTAGGAATACTAGGATTAGTCCAGGATGGGTACCTTCTCTGCTCCCTGAGGTGGTGGTAGCGA
TGGTAGAGTCTTATGGAGGAAAGAGTGCATGTTAGGATGAAGGTAGGGCTAAGCAACAAAGGGCAAGG

E

FIG. 16B(5)

E



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E
GCCACTATATCATGCTAAAAATGGTTTTTTTGTATGTCTTCCTTAATTTTACAAATGCTTCCAAACAAAG
TAGCACACAGGAAAAAGAACATAGGGACTCTACTGGTGGTGCTTTTATCTTAAGCCTTGACTTGCTT
TTCACAGCTTACTACTGCTTGACCTGAGGCCATATGCCCTGTAAAGCTTCTGCAGGGTTTCTACTA
AGCTGGGTTCTTATAIGGCTCTCTCCATTTCTGTGGCTCACCTAGTAGATCTTTCTCTTTTCTCTCA
CCTCTGGGACTGGTGGCTGTTGTATGGACTGCCTTAGCTTTTGGTGTCTTCTGGGACAAATG
TCTTCAGATTATCCTAGACCAATAAATAACACTACAGCCACTGGGCCAGGCTCTTCTCCTCCAACTGGAGCA
TGTTCCAGGGCTCTTCACCTTAGTTTAGTCAAGCATCTTGGCAAAAGAAAGGCTAGTTAAACAATA
GACATTTCTAGCAATTGATTTCTTTTGACATGTTGTGAAGATCTATTACATTTTGTAAATTAAGCATTC
CCTATGGAACCAACACGAACCTAAGCTGCTCTGGAATGCAGGGTGGCTCCTCAATACAGGATGTTCT
AGAGAGCTGTAATTTTGGGCACCTTAACATACTTCTCCACTACTTAGGGCACAGCACTGAAATTAACACCACT
AAGTTTGTCAATGTCATGTAGTTAGTCTCAGGCAGTGCAGCCCTCAGGAGTGGAACTGACCTCTTATGTG
TGTCAGGCTTTTCTTCTCAGAGTCAGCTGTGTTTTCTGCTGACTCTCCATAGGAACATCAGTCCCTG
AATCCTCAGACCAACCATCTGGAGTAGTAAGTGCTCCTGACAGTCTAGAAAGTTGTCTACCGTGGATCT
CCAAAGCGTGTGACACACCCGTGAGAGAGAAATGAGAAAGCTGGGCTCTTCAAGTAAATCTTGCTTTTTC
ACAAGCCCCGTAATTTTACTGCATAATTTTGAATTCACCTGATAATTTCTACAATTTTCCCATAAAGT
CATCTACACACAATACCCCTCTCATGCAACACTTGCTTTTGCTAATACATATCTATTATGAGAGCTGTGC
TTCTTAAGCGTAAATGTTTTATATGCACTAAGGCTCTTGCTTACATATAAAGGGTATTGAGCAATG
TGATACAGAAGTCTTTTCTCCACAGGCTCATATGTAAAGAAATTCATTAGATTGGCTGAAATAGACTGA
TCTGTCCATTTCTCTGCTCACTTATCATAAAGGAAGTCATTAGCTAAGGAACAAACCACTACAATCTATGT
AATTAGAAGAACAAAGCTGGTTTTGCTCAATATAAATAAAGAAAGAAACCACTGTGAAGTCAAAATA
TTTGTTTAATCAGGTCAATTGAGAACTTATTA:AAAAGTATTTGAATTTCTTTATGATGAGAACTATCTTG
ACTCAAGTGGACAGTGGTGAGCTTTTGGCCTGTGGTCCCTACGTAGAAAGGAGGCTTTGTGCATAAAGT
CTTATATGGTACAGGTGCCAAGTTAAGTGCCCAAGCTTGMTCTTAAAGCATACTGGATTTTGTTTTAG
ACTTTTAGTGAAGTGAAGGGAATAAACAATCCCTCTGGGAGAACTTCTCCTCCATCCTTGGTGAAGTC
ATTCTGCCAGAAATCTATCTGGTAGTTACCTTCTCCGATTCTAATGTTGTCCCATGGTCCGACATG
GGTAATTTTCTCTCATTTGTGATTAGTTCCACTACAAGGAATTAATATTCAACTTCTTGCCCTTCTGG
GATATACTCAGCCTTATCAGAGAGCTCTCCAGGGAAGGAAGTATAGATTCTTTGAAGAACTTCCCTGCT
CTTACCCAAACCGATTTCAGTTGTTAATTTCTGTCCACCTTGCTCCATTTTCAGTGCAGGAGAAAGCAT
TTGTGGCAAGTCTGACCTTACAAAGGCTCGTTAATGCTCAATAACTGTGAGGACCTGCTATAAAGTCATG
CCTTTTAAGAAAAAATACACACATGCACACACTCACGACAAGACTGCAACACAACTGTGATGGCAGCTT
GCATATTGAACCAAGCTGTTTCCCTAAACATTTGATTCGGCATCCTTTGTAGACAGTAAATGCAAAAGA

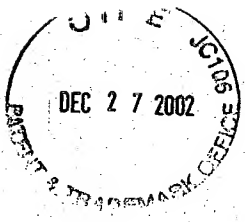
F

FIG. 16B(6)

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FIG. 16B(7)



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G
TTGCCACCCCTCTTTGCGTGTAGCTTAAGTTGTCTTGTCTTAAAAATCTAAAGAGTTCTAAATGATAT
GAAATGCTGTATACAGAAAGTAGAATGACAATGCCAGGGCTGAGAGGAGAGGAAATGGAAAAAT
GCTCAATGGTTATAGTTTATAGCTTTGCAAGAGGAAAAAGTTGTGGATATTGGTGGCACAACAATGCGAA
TATACTTACCACACTAGCTCTATGCTTAGATACGGTTAAGATGGTAAATTTTATGTTATGTATATTT
TATCGCTGTTTTAAAAAAGTTTTAAAAATAGCCTGTTSTAGTCAGCTTCCCTGCTTCTTACTACTGCA
GCCATATTCAGGTCTCCATGGCCCCAAGGTATGGACAACGTAGTCACCAAACTGGTCTCCCCACTTCCA
CCCCTTGGAAATTTGGTCCCCAGCAATCTACCCCTACATGCATGGAGCAATCAATATTACCCATAAAGCAC
TAACGCTGTGCTGTACTCCAAAATGCAAACTTCCATGGTGCTCCCATTTGAATTCAGGATCAAGTTCATAC
TCCCCAGCTTGTCTATACAGGACCCAGTGATCCTTTCCAACTTCTGACCTACTGATTCGCCAGTAGGAAG
CAAACTTAGCAAGACTGGTCTGCCCTCATCCAGAACAGTACTTACTCATGCTGTTTCTTGGCCATGAT
TACCTTCTCTCCTCACCCACATCTTATCTTTCTTTCACTTGATCTTAGTCCAAATGCCGAGAAGCAAT
CTTATCTTACTTTCAAAGCCCCAGGTTCAAGCCCCATCAATCTATAAAACATTTCTGACCCACACTAGTCC
TCCATGGACATTTATTTGAATTTGAACCTCTTAGCATTTAAATATACACAGTTTCTTATTCATCTGTCTT
GTTCTTCTGCTAGTTTATAAATTTGCTTGATTATAGAACATGAGCTTGATAATCTTTGATTTTCTCTGGA
TACTGTGTTCTTGTAGGCTGTTAATAATGCTTGTGAATGAAATGAGAAATGAAGAAGCGCTGCTTTA
CCAGTTTGTCTCTTCTGCCAACTTTTACATGGATTTTACACCTCAACTTTTACACAAATGATTAA
TATACCTAATTTGATCATCCCAACACACTAGTAAATATATATATGATCATTTATCCTCATACTACAGATGA
GGAACACAGGCACACATCGTTTGTGTTTTTTTTTTTGGAGACGGAGTCTTGCTCTGTTGCCAGGCT
GGAGTACAGTAGCAGATCTTGGCTCACTGCAACCTCTGCTCCTGGTTTCAGGCCATTYTCTGCTCA
GCCTCCCGAGTAGCTGGACTACAGGCATGTGCCACATGCCCTGGCTAATTTTGTACTTTCAGTAGAG
ATGGGTTTCACTATGTTGGCCAGGCTGATCTCGAACTCCTGACCTGATGATCTGCCCTGCTTCGGACTC
CCAAAGTCTGGGATTACAAGCATGAACCATGTGCTGGGCCAAGCACACATAGTTAAATAACTTGCAA
AAAAAAAATCGTATCTATTGTAGGAGGCAGAGTCTGATTTCTGAGCTGAATCTATTGGCTCCTA
AGCTTATGCTTTTCTACAGTATCACACATATCCCATACTCTATTGTTATTGTTGGCTTTATTGCTG
TTTTTCTGTGAATTTAACTTCCCAAAGCAGGAATCTTATCTCAGTATATCACAGAGAACTCACTAA
GTATCTATAGGAAAGGAGGAGGAGGAAAGAAAGAAAGAAAGGAAAGGAAAGGAAAGGAAAGGAA
GAAGGAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
GAAGGAAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
AACTCTGGAAGGAGCTTGTCTTACTCTAAGCTTGGTAAGATCAGTCTTGCAAGGGCTTGACTAG
AAACACTGGCTTATCTCACTGAACCATATTCCCAATGTCATTGACTCTTCCCCCTGGGAGTAATTC
AACCATGTGTTCACTGTATGGATCAGAGTTGATGATGAATATCTCTTGCCTCAGTCTCTTTTGGCCAG

H

FIG. 16B(8)



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H

AGTTCCTTGGCTTCCAGCCTGCTCCTTGCTTGTTTTGAACGAATAATATATGACTTTCCTTCTTAACCTG
GCAATGCTGAACCTGTGGCCTCTCTTAACCCCTCAAGTCTCCGATAAAAAGCAAAATATTAGATTTCGCT
GACCAGCGCTACTCCTTACCCCGGCTGATTTTACATGAAGAGCTATATATGGGTGGTAACATAGGTTT
AAGGATGGATGTGCATATAAAGTCTGGATACCGTTCCTGAAAATAATACTATATGGGGATATATTTCTTTGG
TTGAAGAGTCCCTTCACTACCAATGTAGTCCCTTACCTATAAAATGGGAACCTTAGGGTTGTTATA
AGGATTAAATGAGTTAATGTATTAATGTGCTTAGCACAGTACCTGCCACTCAATGCTATTATTGTTGT
TGTTGTTATTATTATTGGTAGTAGTAGCAGTAGTTGTTGTATGAAGATGCATGATTTCTCTGGGAAA
GGTAGACATTAAAGGCAGGATCAGTCATGAGTTACCTCAAGCAGATTAAATTTACTAGCCCTTTTCATGCT
ATTTCCCAAAGGGATGTTTATCAAGTTGAGGAAGATGTAGATGTGATTTATGATGGATTTGAGGTTAG
TACTGTGTATCCAGGTTGTGTGAGAAAGACAAGAAAGAACTGAGGCGACAGCTGTACTTAGGAAGAAC
TCTGGTTTGAAGGTACATAAAGCTAATTCAGACGAGTTTAAACCATAGGAGATTTTGTACAAAGGCAC
TAGGTAACCTGCAGGGACCGAGGAGCGGGTGTCCACTCTCATTTCCAGATTTCTTTGAAATTTCTGTATATT
TTATTCTCTTTCCACAAACAGACTTTCTATCCACGGTGTGATGATAACCAATAACATTTCTCTCAGTC
TCACCCCTTGTAGCTCTGTGACCAAAATGCAAAGCTGCTGCTTCTCCAGCTTCAAAATTTAATAAGAAT
CACAGGGCAGAACATTTATTGGCTAGGCTGAGTTGCATGTCTAACCTTGGAGAACTCACTTTGAATAG
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GTGAACCTGAACATTTCCCTTTAGGCAGATGGAATCCAGCTTCTTAGCTAAAATTTTCCATTCTC
TTTGAGGGGAGTTTCCATGGAGAGGCTAGCTTTGTGGGAGAGAGTGGGAARAAACAACCTCATGCTGTTT
TTCATTGGGGACCATTTCTATTGCTACTTTTAGTCCAGTCTGCCACGGATCACACATTTTCCCTTACT
CTTGTGCTTCTGGCTTTTCTTTTCTTTGCTGCTGCTTATATTTCCCTTCCCTAAAAGCTACTCT
ATTAAGAGGGAGATTAGGCAAGTAGGCTGGTTTGATTATGTGCTGGTTTAAACCCATAATCACATACCTC
AAAAAGAAAATGTCAGACACACTATAATAGCTCCAGATACAAAACATGAAGTACGAAGACCTCTTCAGA
AACTGCAGGCTTGCTACTACCCACAGACAAATAGAGCTGATTTCTATTAGAACAGTGAGGAAGAACA
CAGTAAAGAAATGGCATTTAAGATCAATTGTGGCAATGTCTAATTTTGTCTGGGAAGACCATGGCAGTGA
GGGATGCAAGGGATGACATCAAGTTTTCAGAACAGTGCCTATATGTTTAGGACGGAAGAGTTAAATAAT
GAGAGAAAACAAATGCAATACAATTTTCATTGGCTACCTGGTTAGACCTAGCATGAACGTGTGTCTGTGAT
GGTCTATTAAATTTGTGATGGAGACATTTGATATTGCTTTTCCCTATTGTTAGGTAAGAGCTTGATTCAGGT
AGAGAGAAACAATAATTATTACAGTGTACAAAGCACTTTCTTATACGATATATTATTTCATCCTCC
CAACTAGTTTGATAGGCAGTAATATTATCCCATTTTCACAGAGGGGGAACCTGGGTTAGGGCCACAGGA

FIG. 16B(9)



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AAATTCAGAAATGCATATTTCTGTTCTCTACTTCCAGAGGGTCTGATTGAGTTTCTTGGGAAGGGCC
TAAGAAATGGAATCTTTTATTCACACCAAGGTGATTTTGAAGCATGGGTCTACTGAGTATGCTTATG
AAACATTAACCTTAGGTCCTAGGCCTGGCTTAGTTGACTGTGAGAACTGAAGCACAATAATTGTGTGA
CCAAGTCTTTCTGAGCCTCAGTTTCTCACCCTGAAAAATGAATGATGATGATAAAAAATAACTAGGCTC
CATGCCAAGTGATTTACATATTTCCCTCAAAATCATTTCTTACAAACCTAGGAGTTCGGAGGCATTG
TTGTTCTCTATGCTATGGGACTCAAAACCCAAATCATTTCTACTCACTCTTCTTTCATAATTGTCAGGAA
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TCCTAGAAAGAGTGTGGCAGTAACTGAACTCAACTATACAAAAGACCGAATCTTCTCTTAGTTGGAGA
TTTATTGATTTTGTAGTGAGTTTATAGACAAAACGAGGAAGATACAGAGAAAAAGAGAGAATAA
CTGTGCTTTGATAGTGGGCTATGGGTGATTTTATTTTAAAAATTTTATTTTATACATTAATGT
GGTTCTATAACAAACACAAATTTAGATAAAAAGTAAGATATTTCTCTTGTGCTTCCAAATTTACCATAT
ACTTCTTAAATGATTTGTATCATAATCATCAGCTGTAAGTTTACTATTAAAAAAAATCAACAAAAGAA
CAATATCAGAGCTAAAGGACTTCAGGCCCTGATGAACCTAAGTCTAGTTTCTGTGCTCACTAGCCTTGGC
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AGAAAGTTCTTGGACAACTCTGAACATCGTTGAAGTACTTCACTCAATCTTGGGCATTAATTTTAT
CTTCTGTTCCCTGCCTCATATCATTAACAGTACCTTCACCTACATTCAGTCACTATGGAGGACTAAT
GCTCTATTTTATGTTGAACATGAAGCATAAACATGTACAGCTCTGAACCTGAGTTTCTCTTGTCTT
TAGAAATAAGAGGTGTTGATGAAGAGGAAATCCCTGAGACTCTGTAAACCTWACCTGCAGGTATGAGA
ATACAATCTGTGTTTATKTATTTCTWAGCAAAATTTATAGTAAATTAGTATTTTCTTTTCAT
TTGCTCTCGAATTTCTTTAGTAACAGAGTGAACCTGTATGTCCATATTTTGGGTTTAAAGAACATGG
TTACTGTAGCAAAAGAGGGCTAGCCCATGTATTAAAGTCTCTGGATTATACTGTTGCTCACAGGAGAGC
ATGGGTTTGAAGATGAGGCTGCATAGTAAAGTAGGTAAAGTTTGGACCTTGGGGCCAAACTGCCTAAG
CTCAAAATCATGGTCTGCCAGTACTCTGTCTGACCTTTAGCAAGTTACTTAATCTTGTAGACCTCT
GATTTGGTCTCTTCAAAATAGGGATAGCAATAATGCCCTGTCTTATAGACATTTGTGAGGATTCATGA
ATTGATATTTGTAGAAGAATATTGAGTTGGTTTGTCTAGAAGATATTAAAGTGGCAGTCTTTCTAAAAAT
AACTAAATGCTACAAAAGCAAAATAGCCATTTCTGCAAAAGAGCAGTGATTGAAGCAGGAAAAATGCCTG
CCTTCATAAAGCTTACATTTATAAGGAGAGAAAAATAAGCAAAACAACTACGTGGTATATATGTAATAAT
AAAAATAAGAGGGGGAAGCATGGGGTGGGGCAGATATTGCAGTTATAAATAGAAATGGTTCATTGGAGGC

FIG. 16B(10)



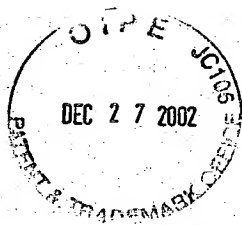
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AGATTAAACAAGAGAAAAGCATGCACATTTATTTAATGTTTTTATGTATACATGGGAGTCCCTCAGAGAAA
AATGAAGACCCCAAAGAAGACTTTATGCCCCAAAGCTTATATACATTTTACACAAGAAATGATAAACT
GTGGAGATGTGACAAGACAAAAGCCCTTGGCTAGAACGAGTAAATTTGTGGAGTAAGGGATATACAGG
CGAAACTAGTGGAAAATGAGGATGATTTAGTTTTTTTACAGTCCATTTTCGATGATAAACTCCAGTC
ATCTCTGGTGATACTATTCTTCTCTTCTGACAAAGGAGGACCTTTCTCATGGGAAATTTTATGAC
CTGCTTTTGGTAGAAAAGGGGAAGTCTGAGAGCTCTTCTGCCCCCTAGTGTCTCTCAAGCCCTTCAGC
TCAAAATATCATTTATGCCAAAGTGGCATATTTGAGGTGGCATGTTCTGAGCCATTTTCATGGGTAAG
GATATCCAGGCTGAAGGAAGTGGGAATGCAAGGCCCTTAGACAGGAACATGCCCTGGTATATTTCAAGA
GACATCTGGGAAGCCAAAGGTAATGAATGACAGCAGAGCATGAGGTGTGGGTGGCAGGATGAGGAGA
TGGTACAGGAGGCACAAATCAGGCAGCATGTTATTGATCACCGCAGAGCTCCAGGTTTCATTCCTATTC
TGAGTGACATGAACGGCCATCAAAGGTGTTTGAAGAGGAGTGAAGTGTGCTGCTTATATCCCTATGCTA
GAATAAGGGTAGAAGCGGGGAGACCAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
AGGCATCATGCTTGGCACATAGTAGGGACTCAATAAATACTTGCAGAGCGAATGAATAAATGGGAGTTC
AACTGGGTAAAGCAACTTCTCTAAAGGCTCTGTTCTCTCATCTCTAAATGAGGTGAAGGTAAGAAAATATTA
ATAGATCTACCTCCAACGGTTATTGTGGAGATTAAATGAGGTCAATCCCATGCTTCCCTAGCATAGTA
ACTGAAACATAAGATAGGCTAAGATGTATACATACACATAAATATAAGCATTTTTCGAAGAGTTTAC
CTTTGGAGACATGGAGGAAGGTAGACTTTTATCTTCTTATGAACATAAAGCAAAAGAAAGAAACA
AGTGTTGAAATATGAGTCAATTTCAAGTCTTTTGTACTTTTCACTACCATTTTGGAAATTTTCCCTATA
ATGAATATGCGAGGCAAAAGACAGAAAATGAAAGGATAAGATCACTCAGAAATTCAGGTTTTTATAAGCA
TCAGAAATGTAAGACTTTTCTCTGCTACTGCTAGTGGCCCTTTCTCTGACTCTTTGAATGTGGGTATTAT
TCTCATCTTTCTCCCTCCTCTCTCTTTTGGTTAAAGTAAAGAGAGCTTTTGAAGCTATTATGGAAC
AAGAACAACAGCCTAGTTCACTCTCAGATTTTGGAGCCTCTTATCTCTTCCAAAGAAACACACATCTA
TTTAGTGGCTAAGAGTCTCTTGAGCTGAAACCATTCATCACCATAAATCACTCAAACTGTCTGAGGTA
TACATTATAACTAAGAAAATGGGTTCCCTCATTTGGAATTTACAACTAAATATTCAAAGAGGGTTCTG
ATGCTTTTAAATAGGGCGCCCAAGGTAAGTAAGACATGTGGTTGAAGACACAGGAAAGGGCA
GAGGTCACCAGAAAAGTTGGTTGTACGCTGATCTTAGGGCCTCATAAAGAAATAATATGCGAGAAT
GAGCCCTAAGAAAGCAAGCACTTTAGCATGGCTCTCCCTGGACAAAGTGGAGAGGCCCTTCCACCCCTAAC
TTATCCTATTGTCCCTGGTCTTCAGTCTTTCCCTGTCTGTTTCCCTTCTGCTGTTTAAATATACTGTTCC
TAAGGTTTTACCCCTGCTGACTTTTAGCTCTTCTTGCTAAGATTCCCTGGCTGTACATTAGAAAACCTCCT

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FIG. 16B(11)



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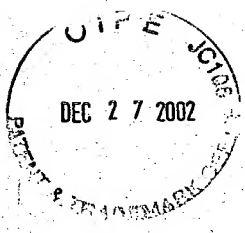
K

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AAATCTAAAGCTTCCAGTTGATTCCAATATGTAGCCAGAATTGAGACCAGAAAGCTGTTAATACCCAA
GTAGTATACTAATATTAATAATGATCATAATAGATTAATAACTAACATTGAATGAACCTTTAAATGTGTT
AGCTGATTTAATCTCAATGACTCTGAGGCAGTTACTATTATTATTAATGTACCCCTTCTACAGATGAA
GAATCAAGATACCAAAAACTACATAAATTTGGCAACAAGTAAATGCTAAAGTTGGAATTCAAACACA
GGTAGTTTAGTGTCCGAGCCACACTCTTCACCAACACACTGGTGATTTGCCACCTGCAATGTTAAAA
ATCGCAGAGGATAGTGATGATACTGCAGACACACTGCCTGCATTTTATCTCCTCTGTTAGGCTGAGC
CATTCAATACCTCAGTGGTCCACACCTTAAAGGCAGGATATAAGGTAATATATGTACCTTCTCTGATA
TGAAGTACAGACTCCATCCCTTCTTTTAAAGTAATGTAATGATTAAACAGCTTTCTGTTATTCTCTTC
AGAATCTCATAGATAAATTCCTGGCATAAATTAGTATCATAAGTTTCTATTATTGCTCATTA
TCAGTATGIGATGTAAGATCAAGCAGTAAGAGTTCCCCCAACCCCAAGAAATGCTCTTCTGTTGTG
ACAAATTATTCTTGGCAATGTAATTAGCCAGTTGGGTTATTGAGGGGGATCCACTAGTTCTAGAGCGGC
CGCCACCGGTGGACTAGAT

Contig 3 (11811 bp)

CCTGTTAAAGTTTACCTTGATCTTAAACTTGCCTAACCGGATTAATTTCTGGCCAAATAGGAGG
CTGAATGAAAGTTTACATAAACCTTAGATACTCCTAATTAACCTGTTTTTATGTCTGTTTTCTAGGA
CACATGTTCAAAGAGCATAATTAACTTTTAAAGAAGCTAGTAAGTACTGAAATAGTTTTTAAAGTTT
TTTCTACAAGAAATAGAGGAAAGAAAGCAATGGAATTTCTGAAGGCTACTTAGCAAGCTGCTTATGGC
ATAATCTGGGGTGGGGTGCAATAGTAAAGGATTTGCATTTTACTGAGACCGATACATGTCAAGGGAATG
GTATTTAAATTAGTGATATGTGTTGATTTTCAAGGACTATAGCCCATCAACTACAATAGGCTCCAAA
AAATCTGTTGAAATTAGCTTCTTGGAGCCTTCCAGTTTACCTACTATGTTATTTCCACTATAAAATAT
TCTCAACTTTTGGGTTTTAGCCACTTAAAGTTTTTATTTTCTCTAATGTCTCTAGTATCTGCTTTAGT
TTCTGTCAATGCTAGACTCTGTGTTTCAGCAGTTTCTCCATCTCTTCCCAGTACTCAACCTCGTTGC
TTATAGTTTTCATTACATCTAGCAAAACCTTAATTTCTGTATGTTTGCATACCATTAGTGTCTTAGA
GCATTTTTCAGAAAAGAATCCTGGAAAAATGGATCTTATCTCACCTGGGCCCTCAGGACTGCTGGGCT
GCCTGGTGTGAGCACTTCCCGCCATTTTCTATAGCACCAAGTATTATCTTAATACTTTAAAAAACCCACC
AGGCACGGTGGCTCACGCTGGAAATCCAGCACTTTGGAGGCCAAGGTGGGGGATCACAAGGTCAGG
AGATCAAGACCATCCTGGCTAACACGGTGAAACCTGTCTGTACTAAAAATAGAAAAAATTAGCTGGG
CGTGTGGCATGCACCTGTAGTCCCAGCTGCTGGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGA

FIG. 16B(12)



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GGCGGAGCTTGAGCGGAGATTGCACCACTGCACTCCAGCCTGGGTGACAGAGCGAGACTCCGTC
TCAAAAAAAGTAAATAAAAAAACCATATCCCACTATCTCCCCCTCTCTCTTTGCTGTG
ATCTTGCTGCATCTTATGGGAAATCTTAAAGATGTAGATTTAGTTCTCTCACTTTCTACAACTT
CTCCCACTTTGGCTTTCTTATGTACCTTCCCTTCCCTCCATCTGATTCCTTATCAGTATTTACACAT
GATTAGTCTTGCCCTAACCTAATAGACCCCTTCTTGAGTGCAAAATCAGTGGCTATTTTGTAGGGTAT
AAAAATTACCTATCTAATCACCTTGACAAAAGTTACCCCTGTTATTTCCAAATAACTTACTTCCFATGGATT
CTTGAGATTTCTTTTTTTTTTTTTTAAATTTTTTATTTTTCAGATGTTTTCTCGCTTGTCAACCATGC
CTGGCCCTAAATCTCGTAGGTTTTCTATGTAAACAATCAGATTTTCTGCAAGTATTAGTCTCCTTTCTA
ATTGTTATAATTTTAAATTTCTTTTCTTTTAAATTTTTCGTAGAGACAAGTTTGTCTATGTTGTCC
AGCCTGGTCTTGAACTCCTGGGCTCAAGCAATCCTCCCATCTCAGCCTCCCAAGTGCCATTACAGTGG
CATGAGCCACTGTGCTGGCCAAATTTCTTTCTTGTGCGAAGGCAGACTTTTCATACAATACTGAAT
AGAAGTGATAGTAGATTACTTTATTTCTGATTTTCAAAGGAATGCTTCCGTTTCTCTCTGTTGAAGAT
AATTGCGTATTGTTTTTTTTTTTTTAAATAGTAACCTTTATCAGGTTAAGGAAGTTTCTTCTATTCTAT
TTAAAGGATTTTTTAAATCTTGAATTCATATGTTTTTATCTAATGCATTTTCTACATCAGTTGAAAT
GGTTGATGAACCTTTTTAATATGGGTGAATTAATTTATAGATTTTATGTTAAAAATATCCTTGTATAT
CTTGGAATAAACAAGTATGATTTATCTTTTTTATATGCTAGATTCAATTTGTTGATACCTTTGT
TATGATTTTGAATATATATTTGTGTAAGTGAAGTGGCTGTGATTTTCTTTCTTGTAAATGTTTCTGTC
CAGTTTTGGTGCCTGTTTTGCTCTCTCCTTAGAATGAGCTGGGAACCTAGTCACTCTTGTGTTTCTCACC
TATAATAGCATCTGGTCCAGTGTTTTTTATGTGGGACAAATTTGAACCTTGTTGTTCAACCTCTTTAAT
GTAAGAATATTCAGGTCTTTTGTCTTCTGCGCTAGTTTTTTTATTTCTTTCTAGAGATTCTGTTCAAT
TTTCTTAGTTTTATTTGCCCTAATAATTGTGGATAATCTGTTTTTTTATCTGCTACTTCTGTAATATTCC
ACATTTGATTTATAATATTAATCTGTGGGCCAGGCTCGTGGCTCACACCTGTAATCCCAAGCACTTTGG
GAGGCCGAGGGCGGATCAGGAGGTCAAGAGATCGAGACCATCCTGGCCCATGGTGAACCCCGTCT
CTACTAAAAATACAAAGAAAAAATTAGCCGGGCTGGTGGCAGGCAGCTGTAGTCCCACTACTCAGA
AGGCTGAGGCAGGAGAAATGGCGTGAACCCAGGAGCGGAGGTTGCAGTGAGCCGAGATCGCACCACTGC
ACTCCAGCCTGGGCGACAGCGGAGACTCCATCTCAAAAAAATAAATTTACTTGTGCTTCTCTTT
TTACCTGTTTGTAAATTTATCAATAACTACTTTTGGCTTTGTTTCAATTTTATTATACAATAAATGA
AATTCTTTTCATTGATTTCTTTTCATTGATTTCTCTATAAATCTTAAACAACCTTTATAATTGATGTA
ACAAATAACCTGTACACATTTAAAGTGTAAAATTTATTACATTTTGTATCCATGTATATAGCAGGGAATA
TCACCACAACAAGAGTGTGAACATATAATCTCTCCCAAGTTTCTTGTGCTTTTATAATCACTGCC
TCTTGCCCTGCCCCACTCCCTCATCTTAAGCAACCATTTGGTCTGTTTTCTGCCACTATAGATTAGATT
GTATTTCTAGAGTTTTTATACAAGTGAAATCATGTAGTATAGTATTAAACCATGTGTTTGTGTTGTT

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FIG. 16B(13)

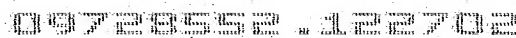


FIG. 16B(14)

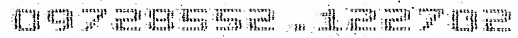
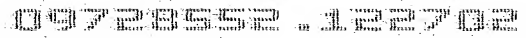


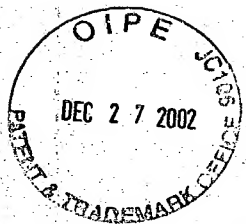
FIG. 16B(15)



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FIG. 16B(16)

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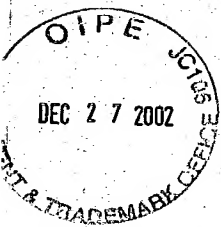
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GCAGGGTTCCTAAGGACTGAGATTCCCTGGATGGAATTTTCAGGGAAGGGGAAAAATTTCTGGATATAGTG
ACTGGGGAGTTAAGGGTGTCTAGTCCAAATGGCTTTTATTTCTTGGGAAGGTAGGCAAGGCCAACAGCC
ACATGTGTGGGAGGAGATGGTTAGAGGGGAGAGGAGTTTGAAGGCACCCGCTATGGAGAAATTTGGAGAGA
GCTAAGGAAAGACAGAAAGACTGCAGAAAGTGCTTAGGGTTCCACTGAAGCGGAAATAGTGATTTGTAG
TGATACAAACCCTTATGAGTTATTTGATTTTATTTTAAAGCAGCATCTGGCAGTCCAAAGTATAGG
GCTGACAGTTTGGGATTTTCTTTCCATGTTGGTGTAAAGAAAGAACAGTGTAGTGAAGGAAGTTAGGA
CAAAAGAAATGATTGAACCTGACACCAAGTTTCTTTGATTTGGTAGAAAAGGAAATAAAGATAGAGCAGAG
ATATTGAAAAGAAATTAGAGAGGGGTTCAAGAGACTGAAGGCCCTGGGTGAGGTGAGAGCAGGTGTGGT
AGACATAACAGAGAGAACTACAAAGGATAGAAAGTGTGGTTGGAGAGTGGGAAGGCAAGATTTATTCAGT
ATGGGGGCTTTTCTGGGTGATGACAGCATCTGGAGTACAGCCATTTGCTGAGTGGCCCAAGTGTAGCA
GAGATAAAGCGTTGTTGGAGTGAAGGAAGTCAAGGAACCTGAGAGGCTGGCCTAGATGGGATTTTGGTT
GTCATCCATGAGGATATTGAAGTCATCCAGGAGAAATAGCAGGCTGGGGGACAGGAAGGAACTGAGCC
ACTTACAGTGTCTCAGTGATAGGAAAGCACAGGGCAAAAAGCTTTCAAGAACAGGGACTGTTAAGCCG
GGTACAGTGGCTCACACCTATAATCCTAGCATTTTGGGAGGCCAAAGCGGGTGGATCACTTGAGGTGAG
GAGTTCAAGAGACCAGCCTGGCCAAACATGGTGAACCCCATCTCTACTAAAAATACAAAAATTAGCCAGGC
ATGGTGGCACGCGCTGTAATCCAGCTACTTGGGAGGCTGAGGAGGAGAAATGCTTGAACCTAGGAG
GCGGAGGTGGCAGTGAGCCTAGATCGCGCCCTTGGCTGCGATCCAGACTTCACTCCAGCCTGGGTGACA
GAGCAAGACTCTGTCTCAAAAAAAGGAAAGAAATCAGACTCTTAATATTTGTAAGAAAGTAGTCCCTTG
AGCTACTACTTAAGTCTAGAAAGAGTTGATATTTCTGTTTAAAGAGTGTAGGGCACTTTGGGAGGCTG
AGGCAGGTGGATCACTTGAGCCCAAGGATTCAGACCAGCCTGAGCAATATGGGAAACCTTGTCTCTA
CTAAAAATACAAAAAATTAACCAAGCATGTGGTACGTACCTGTAGTCCCAGCCACTTGGGACGCTGAGGT
GGGAGGATCACCTGAGCCCAAGGAAATGGAGGTTGCAGTGAGCCAAAGATTGCCGTACTGTACTTAGCCT
GGGCAACAGAGCAAGACTCTGTCTCAAAAAAAGGAAAGGCGGGGATTAATCATAGTGCCATTATTATTAT
GAGTTTATGATGGCTTCTCTAAGCACCTTTTACATTCGGCATTTATTCAGTACCTATTAAAGCATCAAG
GAGTCCAGAAAAAATTTATATATATAATATAATAAATAATGTAATAATATATATATATGATATGCTTCCCT
ATCTCAGGAAGGAAATATGTGAACATCAGGAACCGAAGTCTACTCAGTTACATGCCATTGGATATATCA
CACAAGTGTGAGGGAACTCAGAAAGGCTCATTTATCTGGGAGTGGGAAGGAGGCACAGAGATGTGC
TTTGGGAAAGTTTAAATTAATAAGCAATGGGAAATGAAGACACACAGGAGGCAAGCAAGCAAGA
GACATGAAAGAGTAAGTCATGTGTTGAGGATCTGGGATCCACTAGTCTTAGAGCGGCGCCACCGCG
TAGCAGTTACCG

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FIG. 16B(17)

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Contig 4 (1241 bp)

TCGTGATGGGTATTTCTCTTACGCATCTGTGCGGTATTTACACACCGCATAGATCCGTCGAGTTCAA
GAGAAAAAGAAAAAGCAAAAGAAAAAGGAAAGCGGCTCGTTTTCAGAAATGACACGATAGAAAT
GATGCATTACCTTGTCATCTTCAGTATCATCTGTTTCGTATACATACTTACTGACATTCATAGGTATAC
ATATATACACATGTATATATATCGTATGCTGCAGCTTTAAATAATCGGTGTCACTACATAAGAACACCT
TTGGTGGAGGGAACATCGTTGGTACCATTGGGCGAGGTGGCTTCTTTATGGCAACCGCAAGAGCCTTG
AAGCACTCTCACTACGGTGATGATCATCTTTCCTCGCAGACAAATCAACGTGGAGGTAATTTCTGCTA
GCCTCTGCAAGCTTTCAAGAAAAATGCGGATCATCTCGAAGAGAGATCTCCTACTTTCTCCCTTTGC
AAACCAAGTTCGACAACTGCGTACGGCTGTTTCGAAAGATCTACACCGCTCTGGAAGTGCCTCATCC
AAAGCGCAAAATCCTGATCCAAACCTTTTACTCCACGACGGCCCTAGGGCTCTTTAAAGCTTGA
CCGAGAGCAATCCCGAGTCTTCAGTGGTGTGATGGTGTATGTAAGTCAACCAATGCACTCAACG
ATTAGCGACCAAGCGGAATGCTTGGCCAGAGCATGTATCATATGTTCCAGAAACCTATACCTGTGTGG
ACGTTAATCACTTGGATTTGTGGCTGTTCTGCTACTGCTTCTGCTCTTTCTGGGAAGATCGAG
TGCTCTATCGCTAGGGGACCACTTTTAAAGAGATCGCAATCTGAATCTTGGTTTCATTTGTAATACGC
TTTACTAGGGCTTTCTGCTGTGATCTTTGCTTTCGTTTATCTTGGCTGCTCATTTTTTATGTAATATTC
TTCGAAGAAATCACATTACTTTATATATATGTAATTAATCATATGTAATGCAATCGCTAAGAAAAA
AAAAGAGTCATCCGCTAGGTGGAAAAAATAAATAAATGAAATCATACCGAGGCATAAAAAATATAGAGT
GTACTAGAGGAGGCCAAGAGTAATAGAAAAAGAAAAATTCGGGGAAGGACTGTGTTATGACTTCCCTGA
CTAATGCCGTGTTCAAACGATACCTGGCAGTGACTCTCTAGGCTCACCAAGCTCTTAAACGGGAATT

Contig 5 (1701 bp)

ATAAAAAACAGTTAATTAGGAGTATCTAGGTATGTGAAGCATTCATCACCYYCCTAYTGRCAGAAAWT
WTCGWTAGGCAAAATTTTATATTTTAAGTAACCTTTAAACATGAACACTTCTTAAACTTTGGCTCATAATTT
CACAAAAATTAGGCTGCAAGTCACCATATTCATCAGATACCTGGCAGACACTAATCTTGGGCTATGAC
ACCAAGCAATACTGAAATCTTTATCTTTCCAGGGGGTTGTTTCATGTATTCAGTGTTCGAAAAGAGTT
CCTGCTGAGCTAAACACAGTCCACTGTGCACTCTACGAAAGAGTCCATGAGACAAGCATGGGGAGGGT
AGGAAGTTTAATACTTTTCACAATGCCTGTGGAGACGCTGGCAGTGATGAAAGCCTAGAAAACTCATGAA
AGGACCTTTTATGAGCAGGGTGAATGTAGAGCACAAAAGCAAGTCAGATGACCCACTTAAAGCTTTGC
CTTTACTGATGAGAAATTCATTCATCTCCAGATTAGTCTCTCTCTAGAAAAAGCAACCTTATATAAGA
GTTGGAAAAATTAAGATACAGGAAGTATAATTCTACTAAATCCAGTTTTTCTCTCTCAAAATATCAGCCT
AAGTCTAAGGTCTGTGGCCAAAGACAGAAAAATACAAAGGCGCTGAGAAATATGCTATTTATCTTGGTGT

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FIG. 16B(18)

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GGAATTGACTCATAATAGAAGAGGCTGGCAGGCTGGAGATTTCAGGGAGGAGTTGCATTTCAAGTGCAAA
GGCAGACTGCCAGAGAATCCCTCTTGCTTGGGGAGGTGAGCCTTTTGTCTATTCAAATCTTTGAGG
AAATAGAAAGCAAGAATATATTAACTATATTAAACAACTAAATGTTCCAATTAAATACAAAAATT
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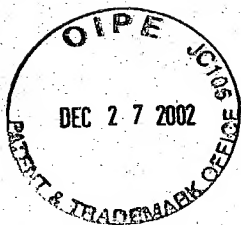
Contig 7 (3140 bp)

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CTTTAACTGCAAAATCTTAAATCCTAGCAAGAAAAAGCAGCATATGTTATAATTATACCACAACTG
ATCAAGTAAGGCTTACTTCAAAAATTTAACCATGGTCCATTATTGGAAAAACATATTAAATAATCCTC
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TCTTTAAAAAGGCAATCATTTGGGAAATAACCCGCTTACTCAGTATTTACTATGTGCTAGGCCCTGTTT
CTTCTACTAGAAATAGTGAACAAATTTCTAACAGAAATCCCTATCTTCATGAAGCTTACAGTCTAGTACA
GAAACTGACATTAAACAAATCACCTCACAGACAAATAGGAGAAAGTATGGAAAAAGAGAAATTATAGGAC
TCTAAGAGCCTATAGAAGAAGAAAATTTGACCTAGTCAGGGAGCTCAGCCAAAGGCTCCCTAAGGCAC
GATTCCTGAGCTGACAAAGTAGAAGATGAACAGGAATCAGGGAGGCAATTAAGGAGGGCAGGAACTCCAT
GCCAGTCCGTAACCTCAGAAAGGCGAGGAGGGTCTGAAAGAAAGCCACCGTGTCTGAAGTATAAAGA
GTAAGGGGAGCAGGTGCCAGGAAGCTGGAGATGTATACAGGGTAGGGCCACACAAAGGTGATTTTCT
TTGTCCCATAAAGCATTAAGAAGCCTTTGAAGAACAGAAAGCATGACAGTGACCTCCCTGCCCTGCATTTT
GGAATGAACACTTCATTTAGCTGGGTAGAGAAATATAGCACTGGATGTGGACAGTCCAGTTAGAAATT
ACTGGTGGAGACACAAAAGTTTACAAGGAAGGAGATATTCAAGGAAGTAACTGCACAGGGTGTGATAA
TAGATTTGCTCTTTGGGTGACAGGGAGTGCTGAATGCTACTCCTTTTGGTTTCTGATTTACCTAACAG
ATGCCATCCAGTAAGTCAGATAACAGAGGAAAAGAGACAAGGCGTAGTGGCTCATGCTGTAATCCAG
CACTTTGGAGGCCGAGGCGGATCATTTGAGGTGAGGAGTTCGAGACCAGCCTGGCCCCCTCTGCT
GGTCTTGATTGAAGTCATTGCAACTGTAATCATCTAATGGTTTCATCTGGGACTGAGATTGTCTCAA
GCACATGTCTGGCAGTTGGTGCTCACTTGTGATTGGGCTCTCTCTTAACGTAAGGAAGTGAGCCAAAG
CTTCTCACATTATGACAGCAGTGTCCCATAGAGCCAAATGACAGCTGTAAGTTCTCTTGAGGTATCAA
CTTGGAGACACACCATTACTTCTGCATTTTATTGGTTTAAAGCAAGTCACAGGGCCAACTCAAAATTAA
GGAATGGAGAAATAAACTTCACCTGTTGATAGGAGTGGCAGTGTCTCACTGTAAGGCAATGTGTACAA
GGATGGGATTTTACGTAGCCATCTTTGCAAAACAGTCTACCACAGTGTCTTTTTCCTTTTCGAGTGCCTTA

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FIG. 16B(20)



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AAAAAATTGTTTTAAATAAATATTGGTTTTTCAGAAATTTCACTATTGTGTATCTAGACACAGATTTTC
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TTGGAGAAATTTTCAGCCCTTCGTCTGTTCTTCGAATATTCTTCTGTCCATTCTCCCTTTCCGGCTTTT
CTGAAACTGAAATTTACATGTAGGTTAGATCATTTCAATTGTATCCTTTATACCTCTTACCTTCTCTTTGG
TATTTTATATAAATCTTTTGGCTTCTCTGCTTCATCTAGATACTTCTTTTGACCTATTATACCAG
CTCACTAATTCCTCTTCAGGTATATTTTACCTGTTCTTAATTTATCCATTAAAGATCTTTTTCAGA
TCTGCTATTACATTTTATACCATTTCTTGACTAAATTTCTTAATGCTACAGGACTGTTCTTCTTGTCTG
TTTCTTACTGATTCATGTTGCCCTTTTATGGACTAGACACTGTAGTTTAAATTTATTTATAGAAAT
GACCTGAGACCTATGATATATTTTCAAGAGAGGATTTACGTTTGTCTTAGCTTTGCCTAGGAGTCTT
CAATCATTTTAAATTCAGTTTCAGGGACTGATTTGCTTTTAAAGCAGGGCTGTAGTCCCTACAGGGGTGGT
CAACTTCATTTCACTACCTAATATACCTATTATGTGGAGTACTTGTCTAGATGTTGGGTAGGTCCTTG
TGAGCAGAGCAGACCTCTCTTGGTCTGTATGGAGCAGGAGCTTGATTATAATTGGCAGGTGTGTGTG
TGTGTGTGTGTGTGTAAATAAATAATTTTATTTATTTATTTATTTATAGCCGGGTACAGTG
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GCCAGCCTTGCCAAACATGGTGAAACCCCTGTCTCTCTGAAATAACAAAAATTAGCCAGACGTGGTGCA
GGTGCTGTAATCCAGCTACTCGAGAGGCTGCGCATGACAGTCACTCAAGCCCGGAGGTAGAGGTT
GCAGTGAGCTGAGATTGTCCACTGTAATCCAGCCTGGGTGACAGAGTGAGACTCCATCTCAATATATA
TATGCGTGTGTATATATATATATCTATATCTTTAAGATAGATATATTATATAGCTAAGTAATTAAT
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ATAAGAAATGGGTCTACCATTAATTAGCAGGGACAGGTTTGTGTTAAGCCAAAAACTAAGAGGGCTTAGAA
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TCTAGAGCGGCCGCCACCGCAGGTGGAGCTCGCAG

Contig 8 (18073 bp)

AGCGCGTGGCCGCTCTAGAACTAGTGGATCCCCCGAGGAGTGAGGAGGACCTCAACCCCTACTTCCCTGA
AATGGAGCTCTGAGATGTTGGAGTAGAAATTTGGAAACACAGAGAGAGAAAGGTAGTGTGTTGCA
ACATGCATTGTATATGGGGGTGCGGAAGTCACAGGAGTTTGCCCTCAAGTCTTTCTCGGAGACGGATG
AGGTTTTCACCTGTGATTTCTGCTGGTGGTCTATGGATATAGTACCTGTTAGTGACATGGATCTTCTT
AACTTCTGATGTGCTTTTCTCCCTAGTGACGCATACCAATTTCTCTCCACAGCTTCCATCACCATGC
ATTTGTTCTTTTCCCTTGTCTTGTATTACCTTTCTGGAAAGGAATTTTATTGTAGGCTAATTTGTAC
TCCCACCAGTATTTAACCAGCTGGATATTTCATATGATGTGATCTCTTCTGATTTGGAAAAATAAAAAATGTA

FIG. 16B(21)



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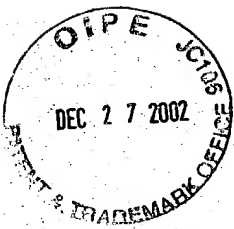
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U

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AATTGATCAAAAAAGTATGGAGAGTTCCGGCCAGGCGGTGGCTACACCTGTAATCCAGACACTTTGG
AAGGCCAAGGTGGCAGATCACAAAGTACAGGTTAAGACCAGCTGGCCAAATATGATGAAACCCCAT
GTCTACTAACAAATACACAAATTAGCTGGTGGTGGTGACACACCTGTAACCTACTCAGGAGGC
TGAGGCAGAAGAACTCTTGAACTGGAGGTGGAGGTACAGTGAGCCACAGTCATGCCCCCTGCATC
CAGCCTGGGCAACAGAGTGAGACTCCGTCTCTAAAAAAGAAAGAAATAATAGAGCATTCCTAAAT
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GCAATTGATGGACCAACATTTGACTCCTCATTTATCACCAGCTTTGGTGTGTACATTTCTGTAGATTTG
GACAAATGTATAATGACATGTGTCTACCATTTGTAGTATCATACAGAGAATTTGACTGCCCTGACAGTC
CTCTGCTCCACCTGTTACTCCTCTCTCCCTTTTCTAACTGCACAAACCACCTGATTTTTTTTTTTTT
TTTGAGAGGGGTCTCACTCTGTCCCCAGGCGGAGTGAGTGGGGCCATTTGGGGTCACTGAAAGCT
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CCAAATCGGGTAATTTTGGAAATTTGAAGTAAAGGGGTTTCCCCATTTAGCCAGGATGGTCTCG
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CCTACCTTTTTTAAAAAACAAGGTCTTGCTCTGTCAACCAGGCTGAGTGACATGATCACTCCT
CACTGAAGCGTCGACCTCCAGGCTCAAGTGATCTCCACCTCAGCCTCCTAAATAGCTGAGACTACA
CACACACACCACTGCCCAGCTAAGTTTGTATTTTATAGAAATGTGGTCTTGTGTGTGTCCAG
GCTGGTCTTGAACCTCGAGTTCAAGCAATTTGCCTGCCTTGGCTCTCAAGGTGTTGGGATTACAGGC
ATGAGTCACCGCACCTGGCTTTTTTATTTTCTTTTTTTTTTAAACCAGTGATCTTTTACTGTCTCC
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TTAGCTTATTTCTTTTAGCAGTGAGTAATATTTTCATTTGTCTGGATGTGCCATCACTTATTTATCCAT
TCGCCTGCTGAAGGATATCTTGATTGCTCCAGTCTGGCAATTATAAATAAAGTTGCTGTAAACATCC
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CATTTTGCAATTTCCACCAAGCAGTGAATGAGAGTTCTGTCTGCTCCATATTTTACAAACATGTAGTATT
GTCAAATGTTTGGATTTTAAACCACCAATCCATTTTCATAGATGTGTAGTGGTATCCCGTTTAAATTT
GCAATTACCTAATGACTTGATGTTCTGTGCTTTTCAGATGCTTATTTGCCGTACTGTTATCTTCTTT
GGTGAGGTGTCTATTACAGGTCTTTTGCCCATTTTTTAACTGGTGTATTTTCTTGTGAGTTTAAAGA

V

FIG. 16B(22)



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V

ATTCTCTGTCCTTTGTGAGATCTATCTTTTGCAAAATATTTTCTCCTAGTCTGTGGCTTATCCTCTGATT
CTCTTGGCATTGTCTTTTACAGAGTAGACATTTTATATTTTAAATGAAGTCCAGACTATCAATATATGTTT
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GGTCTGTTATGATCTCTGTTCCGTTCCATTGATCTGTTTGGCCTTTCTTTTGTGCTAATACACAGTCTT
AATTACCATAGCTTTAAAGTAAGTCTTGAAGTCCAATAGCATTAATCTTTGACTCTTCTTTAATATTGA
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TAAGTTTTATGAAAATCTAACAGTATATCACTGGTTAATGATCACAGCTAGGAAAGATGGGAAAT
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ATCAGTGCAATCAGCCTACCTTCTCCATACCTTCTCACTCTGAAAACCTGTAAGCTGCACCTAGCAATCA
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GGCTGGGAGGTCACTGGGTCAGGAGTTTGAGACCAGCGTGACCAACATGGAGAAACCCCATCTCTAC
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W

FIG. 16B(23)



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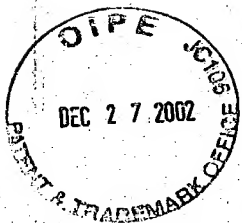
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ACAATGCTACCAACAGGTAAATTTGTCAATTTGATAAGGCTGCTATTTGAAATGAAATTTTGCTTTACATTT
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CTTCTCTTTCTGTGGCACCACATTCAGCCCAAATATAACTCTGGACCCACCTATTTAAACCACTGTCA
ATTCTTCAGACTCTGACAAATGGGACCACAAGAACAGCAAGCACCATACTATAGGCATTACAATTTTCA
CAAATGGAACGTGGCTTCAGATAACCACTTCAGGATGCCAGAACAGAACCCCTGGGAGGGGAATTTCCA
GCACCGCAGCAACCACTCCAGAACTTTCCCTCCTCAGGTACTAGAGATGATTTCTGTTGTTCTTTTG
CTCTTTGAGTTTAGTCTTCTTTTATTTATCTTGTGTTTGTGTTTCTAGCCTTAAAAATTTCTTCAAATAAG
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GGAAGGAGAAATGGGTATTGATGTCCATGACAGTTAGATGTGAGATACAGAGAATGAGTAATAAGATTA
GGTTTGGAAAGGAGGGATCCATGGAGACCATGGAAGGAGAAATGGACATTTGATGTCCATGACAGTTAG
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X

FIG. 16B(24)

X



09/28/99, 12/7/02

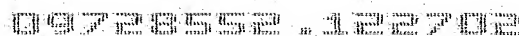
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X

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TGTCATAGTTATTACTGTGTGCTAGGCACTGTAAGAGTTTCTAGAAATAATCCTATGAATTAAGTT
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CTTTCAATTTAACAGTTCTGTGACATGACCATGGATAATCATCTCTTTTAAACAGATGCTTGATTTTACA
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GTGGGCTTTTATCAAGATGAGTAAACACACAGAAACCATTTATCGCACATGGGAATTTATAGTCTTAA
CCCCACATCCCACTTATCACCACCATTTACCAGTCCCTCTGTAACAGTTACAATTTTATTAATCAG
TATTTGATGATATATTGTAATTATGAATATTCTGCTGAGCTATAAGTATAAATGGATTGTTTTT
CTTTGACAGTTTTTTTCTGGATTAAATACTTACCTTATTTTGTATTATTTAGTTTCTATTAGTCA
GGCAGGCACACTGGCTAACACCTGTAATCCAGCACTTTGGAGGCCAAGGTGGACAGATCACTTGAG
CTCAAGAGTTTGAGACCAGCCTGGGGAACATGGTGAACCCCATCTCTACAAAAAATACAAAAATTAGC
TGGGCATGGGTGCATGTGCTTGTAGTCCAGCTACTCAGGAGCCTGAGGTGGGAGGATTGCTTAAGCCC
AGGAGGTTGAGGCTGCAGTGAGTGTGTTTCAATCCACTGCAGCTCCAGCCTGGGTGACAAAGCAGACCA
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Y

FIG. 16B(25)

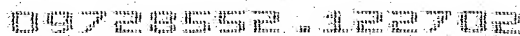


Y

N

FIG. 16B(26)

N

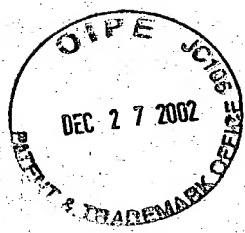


N

A

FIG. 16B(27)

N



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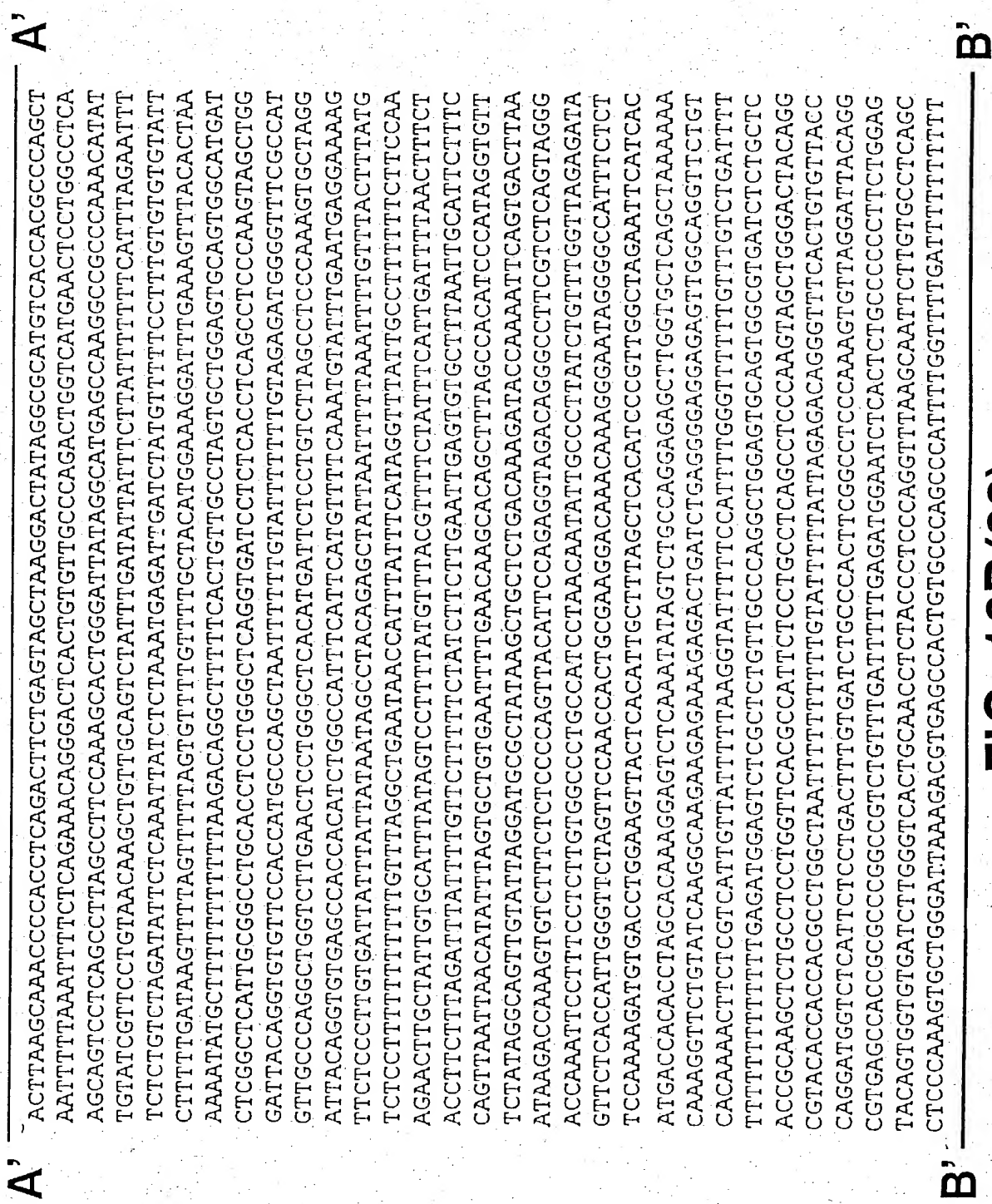


FIG. 16B(28)



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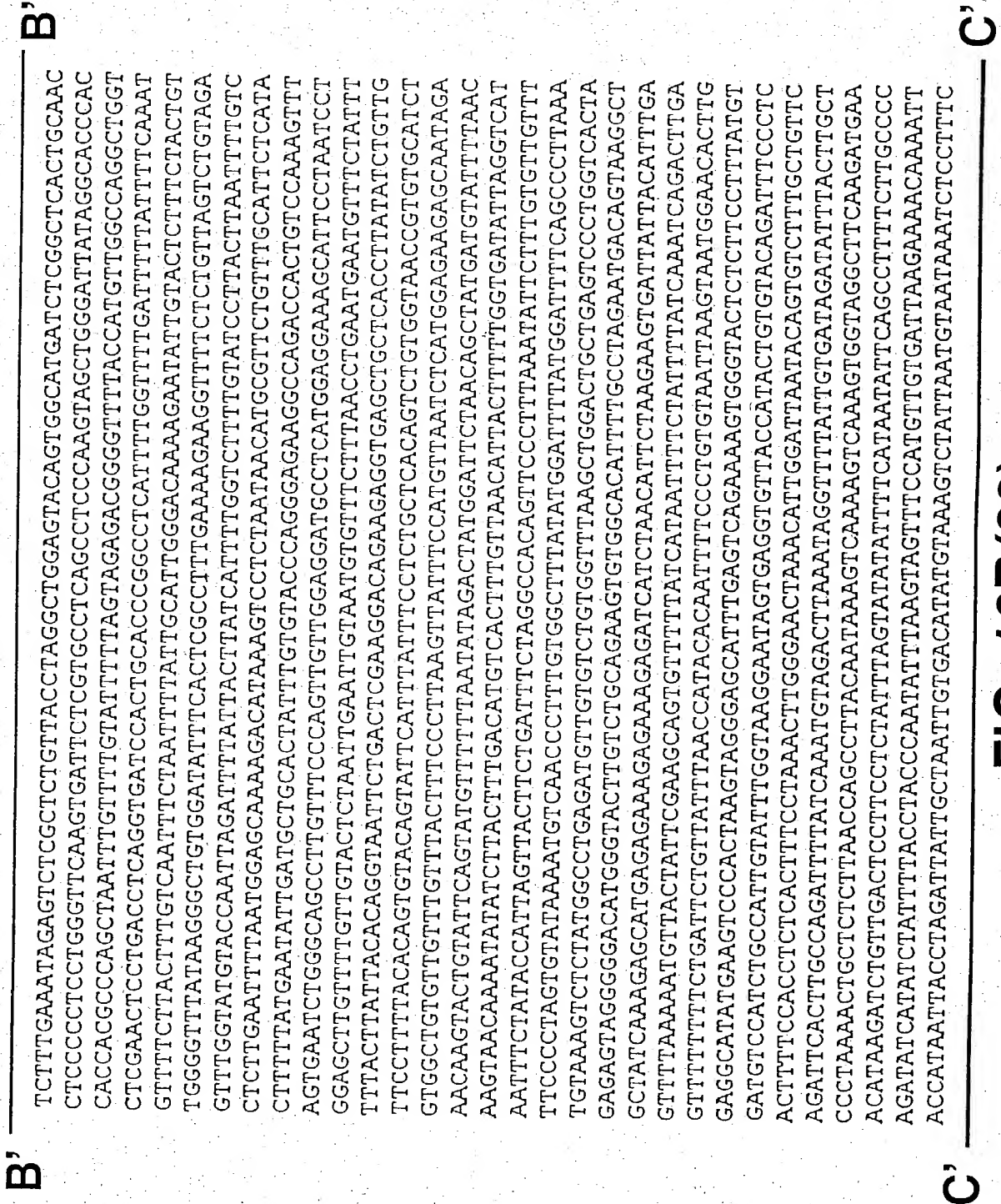
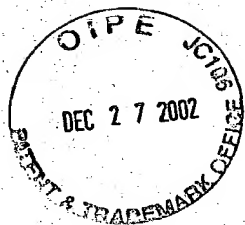


FIG. 16B(29)



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C'

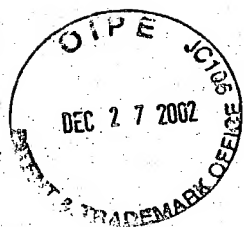
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TTTGGGGTGCTTTTGAACAGTAGTGTCTGATGTTTAAATGTCAAAGCAAAAAGAAATGAGAGGGAGGG
CAACTTTTCTCTCTCTGAATTCAGGAAACTGGTTATTTTCTCATGCCATATGATTTTAAAAATATA
TTCCAGCCAGGTGCAGTGGGTACGCTTGTAATCCAGATTTTGTGGATGCCAAGCGGGGGGA

Contig 9 (7505 bp)

TCCGAGCTCCACGGGTGGCGCGCTCTAGAACTAGTGGATCCCTCTGGTGGCCCATTTGAGAATCAAA
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GCAGGGCTGGACACCGTGTGAGGACCTCAATATATCTGCTCCACAGAAATTCAGACAGTTCAGAGTT
TGGTGAATTAACCTCAAAGGCAGCAAGATATCTGTCCCGGGAGTCAGCAGGTAAAGCATAGCAGAAATGG
CTGGAGCAGGGGAGCCTGCTTTCCTTCTGTTGGCTGTAGCGTCCACTCCATTATAGCTCCTGATGGA
AGATTTCTACAGAGTGATGCCCTCAGAATCTTCCTTATACCTTCTTCCATGATCCTTGACCTCTTTT
CTAGATTTGCCACATTTCTATGTGCAAGTAACCTAGATATACATATCAGACAAGCTAGCAGACCTGCA
TATATCCACTTCCCTACTTTTCTTATAATTTCTTCACTGAACCTCTATCATCTTCTCTTCTGTTT
GACTCTGGTGTAACTTGCAGGCAAGTTGAGCGTGGTTTGGTGTACACA:TGAAGGACTAAGGGAATA
GTTAGCCTTCTATTTATTAACAAATCTTCCCTTTGATGTCTGGATCAGTGTCTCTCTAATAGGAATTA
TGGCATGTTAAGGCAAGAACATATGCTTATTGAGTGTGACTGATGGGTTAATACTAATTTGATAC
TATTAAGGTGTGGGCCCCAGGAATGCCAAATTTCTACCTCAATGTAGAGCCACCATTCCCTTGAGGTA
ACCTAGGTGGGATAGATATACGTGAAGGCTAATGGAAGATAGGGAATCAAAGTATCACTTTATTTT
TATTTTATTTTATTTAATTTTGTGAGATGGAGTCTTGCTCTGTTGCTAGGCTGTAGCGCAGTGGC
ACAATGAAAAGTATCACTTTATTTATATCTGAGCTTGTGCCCTAAACTTCACTGCAGAAATATGCTGGTAA
AATGGACTGGATTACAGGATTTAGAGGCAAGGTCCACAGGTCAAGGATAAGAGGTAAAGAGGAAATCTT
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TCCAAGCACAGTTGATCAAGAGGAAAGAGAAATGATGATGTTTCCCTCTTTCTTTTCTATGAGAAAGT
GGCTCTCTTATTTGATCGGCTACTTGATTAGAGAAACAGTGGGGAAAGAACTGCCATATCCACATGTGC
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TACTCAGGTTATAATACCTAATTTTACAAGGAGTTGGGAAGTGTGCCAAACCTGTAGAAAGTCTATAT
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D'

FIG. 16B(30)



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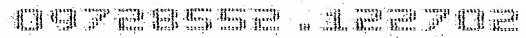
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D'

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CTTCCACCTTTGTTTCCCTACAGTATAATCTTAACGAGCAGCCAGATGGTGCCTACAAACCTTTA
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TTCCTTCTGGATTTCTGCTCTGATGTCTATTTATCAGTGGGCACTTCCCAATTTCTCTATTTAAGACCA
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E'

FIG. 16B(31)



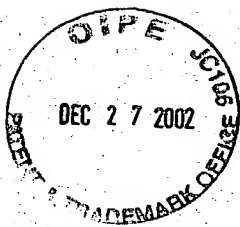
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W

[illegible]

U

FIG. 16B(32)



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F' _____ F'

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ACAGCATAGAAAAAGAAAGGAAGTGGATAGGTCCAGGAGATCCAATACCTGTGCAACAGGAGAGTCCAAA
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AAACCGAAACTGTTTCAACCCCAACTTCATTCCAGCAAAGTTTACTTTCTAGATTCAGGCCAGGGAGC
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GGCCAGGGGGATCCACTAGTTCTAGAGCGGCCGCCACCGGTGGACTCCAG

G' _____ G'

FIG. 16B(33)

5

Contig 15 (529 bp)

GCTGAGGTGCATGCGGTGGCGACGCTCTAGAACTAGTGGATCCCCAAACAAAACCTGTCCCTGCTGCTAA.
TGATGGTAGACCCCAATCAGATCCCGGAGAAAGCCGAATACGGAAACCATATCAGCATACGCATGGCAT
ACATAGAACCCCATACATGGATTGCTTACTCAGCCAGATATAGAAATCTATCTTCAGCATAGAGATATA
TATATATAGACACACTGCATATACAGATGTGAGATGGAGGCTCACTGTGCCACCCGCTGCTGGATCTACA
GTGGCACAAAGCTCAGTCCACAGTCACGTGCGATCTGCCGGGCGTGACCGACTGAGATGCAGCGGCCCTCGG.
GCGTAGCTGTGAGTACAĈGCACCCAGTCATCGGACTGGCTGCAAGTGGTATAGCGGAGGGGACACAGGT
TACAGCATGACGGCTAGGCAGGCCCGAAACTGAGGACCACAAGAGTGCCACGCTGCCCCGAACGCATGCA
GTGGCGAGATTACATGGGGCAGCCCACTAGAGCCGCCGTATCAGAAA

Contig 33 (635 bp)

TACCACGGGTAGCGCCGCTCTAGAACTAGTGGATCGGTAATCCAGCACTTTGGGAGGCCAAGGAGGG
CAGATCACCTGAAGTCAGGAGTTTGAGACCAGCCTGGCCACATGCTGAACTCCATCTCTACTAAAAAT
TACAAAAATTAGCCGGCGTGGTGGCGCATGCTGTAATCCCAGCTACTCGAGAGGCTCGCGCATGACA
GTCACTCAAGCCCCGGGAGGTAGAGTTGCAGTGAGCTGAGATTGTGCCACTGCATCCAGCCTGGGTGG
CAGAGTGAGACCTGTCTAAAAAATAAAAAAAGGCCCATTAGGGGACCCAAACGGTTCCCCAGC
TTTTTGTGGATTCCCCAAATTGGGGCCAAATTTTGGAGGGTTGTCCCTTAAAAAATTTAAATTTGGGGG
TTTTTTTCCAGCGCCCATTAGAAATGGTTCGAAATTTTTTGGCCAAAAAATTTGGTTTAAACCGC
GGACCAAAATCCTAAGTTTAACTTTTTCTAAACCTTTTAGAATTTAAAGTTTCGGGGTTTCTCAGG
AGGGGGTAACCCCTTACCCCAATATAACTCGGAAACCCCCCTTTTTTAGGAAAAAGGGGAATTAGTGGTG
CTTTCGGGGCCAAA

Contig 39 (938 bp)

[illegible]

FIG. 16B(34)